

2016 Supplements/OTC/Rx Consumer Trends

New 6th Edition Report

Since 2005



NMI's bi-annual consumer research study devoted to understanding consumer attitudes and behaviors related to dietary supplements/OTC/Rx and their impact on usage



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Supplements/OTC/Rx Database (SORD) Overview

Supplements/OTC/Rx

Intersection of Supplements/OTC/Rx

- Vitamins/Minerals
- Homeopathic
- Botanicals/Herbals
- Pharmaceuticals
- Ayurvedic
- OTC medications
 - Usage rate of 80+ products
 - Attitudinal statements & beliefs
 - Preferred nutritional formats
 - Condition/health issue mgt
 - Brands, influence and media
 - Barriers to use
 - Sources of influence by product type
 - Role of doctor, pharmacist
 - Consumer directed healthcare
 - Demographic measures

SORD Database Since 2005

- Most comprehensive data and robust data collection vehicle available which examines the intersection of dietary supplements, OTC, and pharmaceuticals
- Ongoing consumer research among U.S. general population adults
- Nationally representative sample of the U. S. population statistically valid at 95% confidence level to +/- 1.2%
- Previously conducted in 2005, 2009, 2011 and 2013
- 2015 research was conducted among 2,001 general population consumers
- Conducted via on-line methodology



Definitions of Groups Used in Report

Group		Definition		
GP		General population U.S. adults (18+)		
USERS				
	Supplement Users	Used any supplement in past 30 days or prior to past 30 days		
Curren	t Supplement Users	Used any supplement in the past 30 days		
	Lapsed Users	Used any supplement but not in the past 30 days		
	Non-Users	Have not used supplements in past 30 days or prior to past 30 days		
	Light Users	Current supplement users using 1-2 supplements/day		
	Medium Users	Current supplement users using 3-5 supplements/day		
	Heavy Users	Current supplement users using 6 or more supplements/day		
	New Users	Current supplement users using 0-4 years		
	Long Term Users	Current supplement users using 16 or more years		
GENERATIONS				
	Millennials	Born 1977-1998 (Age: 18-38)		
	Gen X	Born 1965-1976 (Age: 39-50)		
	Boomers	Born 1946-1964 (Age: 51-69)		
	Matures	Born before 1946 (Age: 70+)		
CONDITION MANAGERS				
	Heart managers	Consumers managing high blood pressure, high cholesterol or heart disease		
	Digestive managers	Consumers managing heartburn, digestive problems, indigestion, intestinal irregularity		
Joint	:/Arthritis managers	Consumers managing joint pain, arthritis		
	Weight managers	Consumers managing need to lose weight for health or appearance		
	Stress managers	Consumers managing stress		
	Immune managers	Consumers managing need to boost immunity		
	Sleep managers	Consumers managing sleeplessness/sleep disorders		
	Energy managers	Consumers managing lack of energy/fatigue		



Introduction

Natural Marketing Institute (NMI) is pleased to present its 2016 Supplements/OTC/Rx Consumer Trends Report which examines the intersection of dietary supplements, over-the-counter medication and pharmaceuticals and how consumers integrate this mix of self-care methods into their current lifestyle.

The research provides a clear view of the supplement industry landscape and the factors that drive growth. Exploration of how consumers perceive dietary supplements, what and why they currently use, and even why they have stopped using certain supplements lays the foundational insights from which to build stronger brand equity, trust, and innovative products and formats to address the needs of today's consumer.

Objectives of the research included providing deeper understanding of consumer attitudes and behaviors toward dietary supplements in order to increase compliance, address barriers, establish trial and build loyalty.

Some of the topics covered in this report include:

- The growing role of self-care and use of self-care methods
- White space opportunities for supplements and condition management
- Reasons for lapsed supplement usage
- Importance ratings of supplement attributes
- Willingness to pay a premium for certain supplement attributes
- The role and intersection of OTC and Rx





EXECUTIVE SUMMARY

The Four Step Model for Driving Supplement Growth

WHAT - THE PRODUCT

Know the Landscape Inside and Out

- What is maturing/declining?
- What's next/upcoming?
- New delivery system/forms
- Disruptive innovation forces
- Commoditization impact

GROWTH!

HOW - BRAND TRUST

Building & Keeping Trust

- Efficacy of benefits/claims
- Safety, sourcing, purity
- Sourcing, manufacturing
- The role of natural

WHERE - BUYING DYNAMICS

Pathways to Purchase

- Channel migration/blurring
- Private label impact
- Price, price, price



WHO - CONSUMPTION

Boosting Consumption

Establish trial for Non-Users

Continually educate all Users

Increase compliance among <u>Users</u>

Address barriers for Lapsed Users

WHO - CONSUMPTION Boosting Consumption

Understanding both reasons for and barriers to use will help increase trial and compliance and help boost frequency, reach, and consumption of supplements across the globe.

- Consumer directed healthcare is taking hold as consumers realize they need to take more responsibility for their personal health.
 - Uncertainty of the future of the healthcare system is helping to drive this increased responsibility as consumers are unsure about the level of care they will receive in the future and therefore want to "fortify" their health.
- ❖ Today's youth-centric society is prompting consumers to reach for solutions to hold off aging.
 - Supplements have a very strong position in the "anti-aging" market as an aid to help healthy aging.
- Conversely, the aging population is exploding along with age-related conditions such as heart and joint issues.
 - Consumers are not only showing high desire for self care they also show high likelihood to use supplements for condition management creating the optimal environment for supplement solutions.
- ❖ There is concern over false health claims, negative side effects and even just general lack of knowledge.
 - These are all barriers which will need to be addressed in order to build stronger consumer buy-in, and increase trial and compliance.
- Marketers must understand that the population is made up of consumer segments with varying approaches to health and wellness.*
 - This will help marketers create more targeted messages to reach their optimal target and help boost consumption.



^{*} See more on NMI's health and wellness segmentation in next section

WHAT - THE PRODUCT Know the Landscape Inside and Out

Knowing the current landscape of the supplement industry and what is on the horizon can help drive innovation.

- The majority of consumers perceive supplement use as a health "assurance" policy.
 - Proactive health "assurance" messaging may be a strong platform from which to build brand loyalty.
- ❖ White space opportunities for supplements are revealed by looking both at conditions for which consumers would be likely to use a supplement and how effective they feel current supplements are in treating or preventing the condition.
 - Understanding where needs exist helps drive opportunity.
- Preference for alternative forms is strong, and is strongest among the youngest generations.
 - Promoting supplement ingredients across a whole new array of categories from shots, bars and gummy-type products will be key to growth; opportunities exist to introduce new forms.
- ❖ Interest is high surrounding "tests" [in-home, DNA, etc.] to determine personal nutrient deficiencies.
 - This interest can connect perceived deficiencies with supplement solutions to drive trial and compliance. The desire for personalization remains high.
- There is a high concern over nutrient absorption of supplements.
 - This continues to prove that bioavailability can be a successful platform and, a brand differentiator.



HOW - BRAND TRUST Building & Keeping Trust

Building trust through transparency of the brand's efficacy, safety, and sourcing of ingredients will help differentiate a brand and establish/maintain consumer confidence.

- While unquestionable safety and proven effectiveness hold top importance for consumers across supplement attributes, less than half of consumers feel supplements are very safe or effective.
 - Brand differentiation can be built via transparency surrounding sourcing, clinical testing, and quality assurance.
- Concerns over the level of nutrients in supplements persists, especially in light of the recent findings of the NY State Attorney General regarding herbal content.
 - Providing clear messaging regarding nutrient levels, the sources of the nutrients and potency will help assure consumers of the quality of the supplements and heighten brand equity.
- The understanding and impact of supplement specific seals/certifications is rather low.
 - Opportunities exist for an authoritative voice across supplements.
- Consumers are also increasingly desirous that the ingredients in the supplements they use are sustainable, environmentally-friendly, natural, and organic.
 - Many are even willing to pay a premium to ensure they are getting unadulterated ingredients.
- Consumers exhibit a general mistrust over corporate practices.
 - Better science can help to build consumer confidence across a broader spectrum of supplements.



WHERE - BUYING DYNAMICS Pathways to Purchase

Consumer pathways to purchase are migrating and blurring, impacted by both the mainstreaming of brands and the rise of specialized supplement brands; understand how to unify and integrate your strategy.

- More consumers shop for supplements in mass merchandisers and drug stores compared to all other channels.
 - However, those who shop in grocery stores are likely to shop grocery most often for supplements.
- Shopping for supplements on the internet continues to grow, growing over 80% in the past 7 years.
 - The internet offers discounts, a larger variety, and niche products oftentimes not found in brick and mortar stores.
- Consumers are also allocating the largest portion of their supplement dollars to the mass merchandiser channel.
 - Less expensive, store brand supplements, along with the convenience of "one-stop-shop" may be helping to drive this spending in mass. Understanding who shops mass most often for supplements and what products they use is key to successful merchandising.
- While the majority of consumers feel store brand supplements are just as safe and effective as well-known national brands, concern over quality persists with one in five consumers indicating they just don't trust store brands.
 - Regain consumer confidence with high levels of transparency and easy access to information about your brand.





NMI SEGMENTATION

NMI's consumer segmentation of the general population reveals five well-defined segments with distinctive paths toward health and wellness.

NMI's analysis of the U.S. population's attitudes and behaviors regarding health and wellness has identified clear psychographic and differentiated segments. This proprietary health and wellness segmentation, based on more than 40 variables, measures commonalities and differences between five distinct consumer groups using k-means cluster analysis. The comprehensive statistical modeling process used to derive NMI's health and wellness consumer segmentation is based on the following techniques and methodologies:

- Exploratory and confirmatory factor analysis of nearly 200 measures of consumer attitudes and behaviors regarding health and wellness, organic products, supplements, exercise, and many other topics. The analysis identified more than 25 potential factors.
- The identification of 31 measures from the factor analysis that best represented each of the potential factors and maintained consistency with the previous years' segmentation solution.
- K-means cluster analysis which examined numerous potential solutions to determine which segmentation model provided the optimal solution, based on the following criteria:
 - > Maximum differentiation between consumer groups
 - > Maximum homogeneity within each consumer group
- NMI's Health and Wellness Segmentation tool has 92% accuracy in predicting segment membership

The analysis determined that a five-cluster solution was optimal. The five segments listed below are mutually exclusive. Within each segment, the key attitudinal drivers of health and wellness exert unique levels of influence.



WELL BEINGS



FOOD ACTIVES



MAGIC BULLETS



FENCE SITTERS



EAT, DRINK, & BE MERRYS



Understanding segment differences helps marketers optimize their target messages and identify primary and secondary targets.



WELL BEINGS®: 20%

Most health pro-active

Market leaders and influencers, driven to health for prevention, utilize all means, including food, supplements, and other products and services, including alternative healthcare.

Healthy eating a priority



FOOD ACTIVES®: 16%

Mainstream healthy

Dedicated to health through inherently healthy eating and managing weight.

Driven by a desire for balance of exercise, nutrition, and weight management

Self-directed balance



MAGIC BULLETS®: 21%

Lower commitment to healthy lifestyle

High belief in and usage of supplements for health, and less concern with food.

Weight managers; high level of health issues.

Quick, easy solutions



FENCE SITTERS®: 25%

'Wannabe' healthy

Young families and singles in relatively good health.

Attitudinally idealistic strivers, whose behaviors often contradict their attitudes.

Health strivers



EAT, DRINK & BE MERRYS®: 18% Least health active

Least concerned about health and healthy eating; least knowledgeable about health-related benefits.

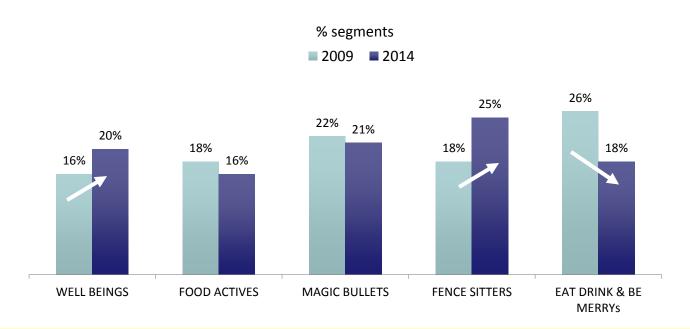
Lack concern for healthy eating and health issues

Little health motivation



The changing composition of the segments shows evidence of how health and wellness is infiltrating even the least health oriented segments.

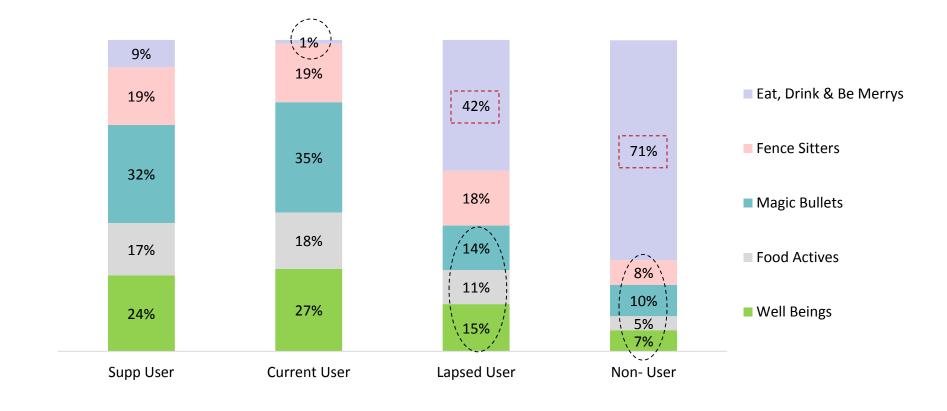
The most health proactive segment, the WELL BEINGS has grown 25% over the past 6 years with WELL BEINGS now making up 20% of the population. What is interesting is the growth in the FENCE SITTERS, which is the segment which aspires to be healthier but are at times met with challenges which prevent them from fully integrating "health" into their lifestyle. The growth in this segment may be driven by less healthy segments adopting healthier attitudes and behaviors which redefine them into this "health-striving" segment. Much of the growth of FENCE SITTERS may be coming from the least healthy EAT, DRINK & BE MERRYS show significant decline as members of the segment may be integrating more healthy attitudes and behaviors into their lifestyle, pushing them from their low health status and placing them more "on the fence."



These shifts in segment membership are a strong indication of the mainstreaming of health and of a population which is getting on a path to living a healthier lifestyle.



Understanding the segment composition of supplement user types helps further define the supplement user groups.





() Low index vs. all supplement users

High index vs. all supplement users

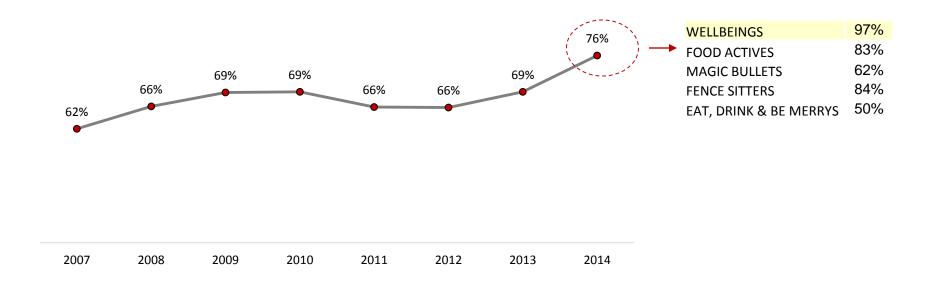


HEALTH MAINTENANCE AND SUPPLEMENTS

A healthy lifestyle is growing in importance among the population, increasing 23% in importance since 2007.

(Q.2 - % consumers indicating it is extremely/very important to lead a healthy, balanced lifestyle; Source: NMI's 2014 Health & Wellness Trends Database)

% general population indicating it is extremely/very important to lead a <u>healthy, balanced lifestyle</u>



Consumers do show a strong understanding of how to promote healthy aging from eating healthy, exercising, to taking vitamins.

(Q.14 - % consumers who strongly/somewhat agree with the following statements; Source: NMI's 2015 Healthy Aging Database)

"-----" is a primary way to promote healthy aging











"Healthy eating" GP: 94%

"Exercise" GP: 91%

"Seeing a doctor regularly" GP: 78%

"Taking vitamins/minerals"
GP: 77%

"Taking prescription medication"

GP: 36%











82% WELL BEINGS 86% MAGIC BULLETS 35% WELL BEINGS 45% MAGIC BULLETS

Green shading denotes high index vs. GP (≥ 120)

While three-quarters of consumers believe seeing a doctor regularly promotes healthy aging, some do not feel their physicians are involved enough in preventative and alternative health solutions.

(Q.31 - % general population who completely/somewhat agree with the following statements)

	KNOWLEDGE	TIME	CONNECTION
	"I wish my doctor knew more about alternative therapies for my condition"	"I wish my doctor spent more time with me explaining my condition and treatment options"	"I wish my doctor would discuss ways for me to lead a healthier lifestyle"
General population	39%	37%	37%
Supplement Users	42%	39%	39%
Millennials	40%	41%	45%
Gen X	42%	37%	39%
Boomers	38%	33%	30%
Matures	38%	37%	31%



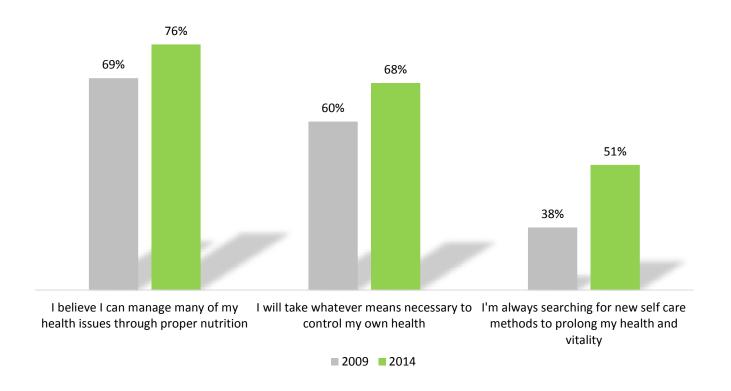
"Oftentimes I feel I know more than my doctor does about how to treat certain conditions I have"

GP: 29%

Therefore, the majority of consumers are taking the reigns of their health and seeking their own solutions.

(Q.33/Q.36 - % consumers who completely/somewhat agree with the statements; Source: NMI's 2014 Health & Wellness Trends Database)

% consumers who completely/somewhat agree with the statements

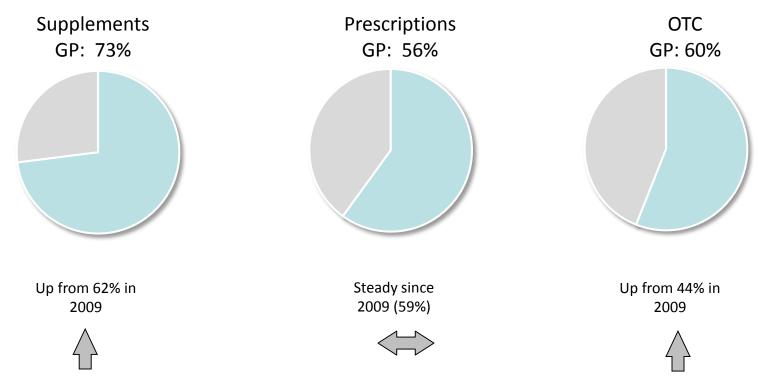


It is understandable that self care methods are also showing increases over the past seven years.

(Q.1 - % general population indicating which products they have used in the past 30 days)

According to NMI research, the population reports an 18% increase in use of supplements over the past 6 years, and a 27% increase in use of over-the-counter medications in the same time period. These increases are evidence of a growing number of consumers seeking out ways to "self-prescribe" solutions and preventatives for conditions they are trying to manage.

% population who have used the following in past 30 days...



"Increasing lifespan" and "maintaining independence" are two very strong driving factors for why consumers are taking more self responsibility for their health.

(Q.55- % consumers [who are taking more responsibility for their health] indicating why they are taking more responsibility for their health; Source: NMI's 2013 Healthy Aging Database)

The following drivers of increased health responsibility have remained relatively stable over the past 3 years among the general population.

This finding helps confirm that the desire to live a long life and to remain independent are strong and steady drivers of consumers' motivation to live a healthy lifestyle.

75% of consumers are taking more responsibility for their health today compared to 10 years ago

Here are the reasons why:

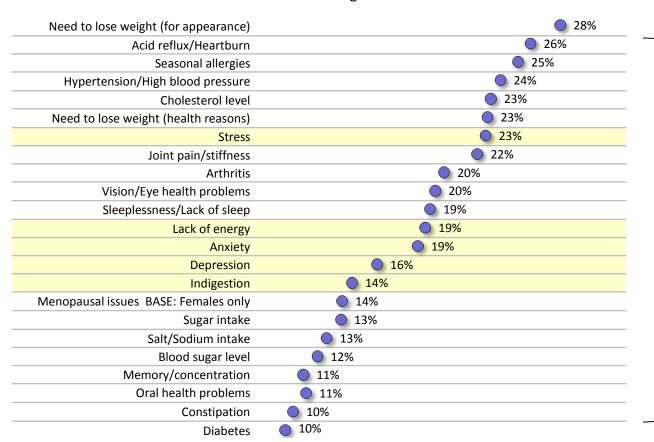
	General population who are taking more responsibility for their health
I want to remain independent as I age	95%
I want to live a long life	92% PRIMARY
I don't want to rely on others	91%
There is an increased amount of information available on how to take care of my health	88% SECONDARY
I'm more concerned about preventing disease rather than just treating it	87%
I'm unsure about the future of government programs like Medicare	82% ← TERTIARY
I'm unsure about the future of the healthcare system	82%
The availability of many healthy foods/beverages makes it easier to manage my health	76%
The availability of a wide range of nutritional supplements makes it easier to manage my health	70%



Even with consumers' renewed sense of self-responsibility for their health, they are still managing a variety of health issues.

(Q.82/Q.83 - % general population indicating they are currently managing the following conditions; Source: NMI's 2014 Health & Wellness Trends Database)

% general population indicating they are currently managing the following conditions





The conditions shaded in yellow are the conditions which are showing increased growth since 2007. It is interesting to note that the conditions which are increasing appear to be related to emotional issues. This may spell opportunities for alternative therapies as opposed to conventional healthcare methods.



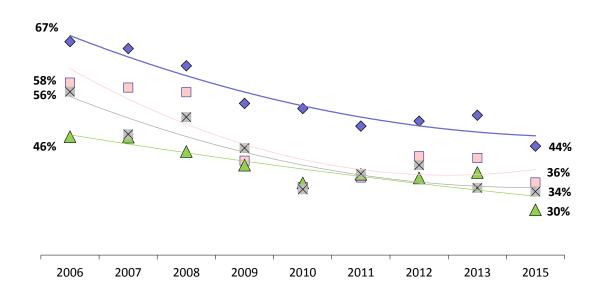
Even further, self-reported ratings of "very good to excellent" health continue to decline across generations.

(Q.1/Q.2 – % consumers rating their overall health/% consumers indicating they are less healthy than they expected to be; Source: NMI's 2015 Healthy Aging Database)

Are self reported health ratings declining because consumers are overwhelmed with information about what it takes to be healthy and feel they are not meeting expectations? Or are they really not as healthy as they know they should be?

Consumers hit many barriers with following a healthy lifestyle – removing those barriers is the first step in easing consumers' path to their health goals.

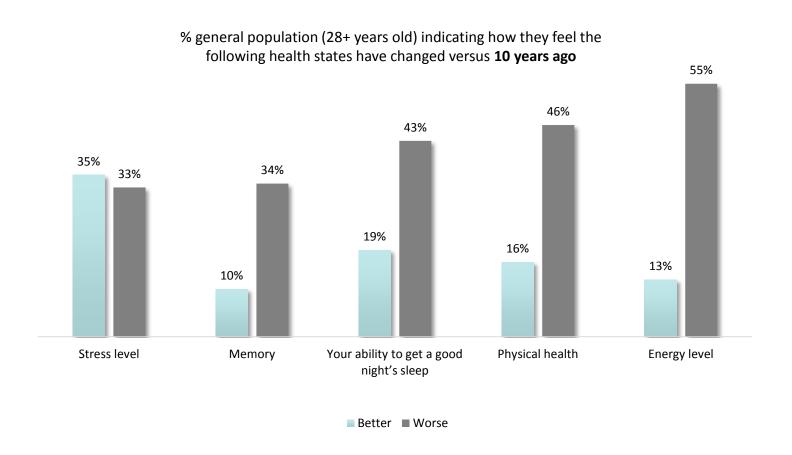
% consumers rating their health as "very good" to "excellent"



	"I am <u>less</u> healthy than I expected to be at my age"
Millennials	21%
☐ Gen X	23%
▲ Boomers	27%
⋈ Matures	18%

In fact, more consumers report worsening health states than improving ones.

(Q.13 - % general population indicating how they feel the following health states have changed versus 10 years ago; Source: NMI's 2015 Healthy Aging Database)

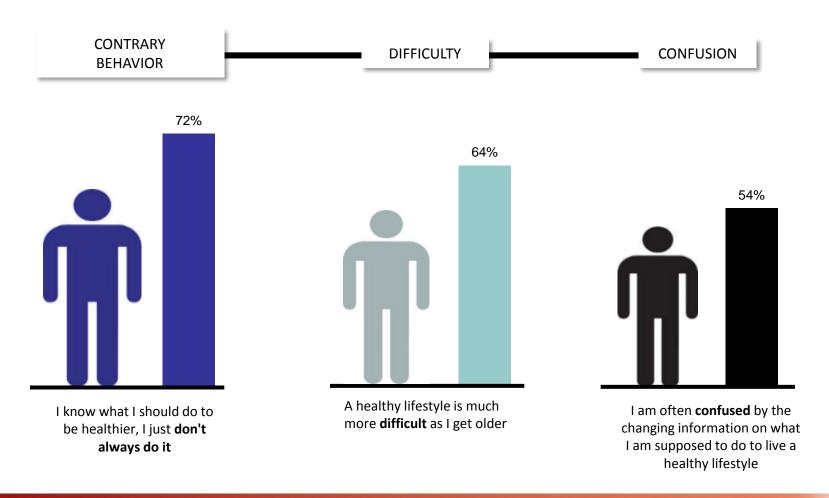




While some challenges in living a healthier lifestyle can be self-imposed, others develop out of conflicting information and confusion.

(Q.5/Q.10 - % general population who strongly/somewhat agree with the statements; Source: NMI's 2015 Healthy Aging Database)

% general population who strongly/somewhat agree with the statements



The majority of consumers feel using supplements on a daily basis is part of their health "assurance" policy.

(Q.5/Q.27 - % consumers who completely/somewhat agree with the following statements)

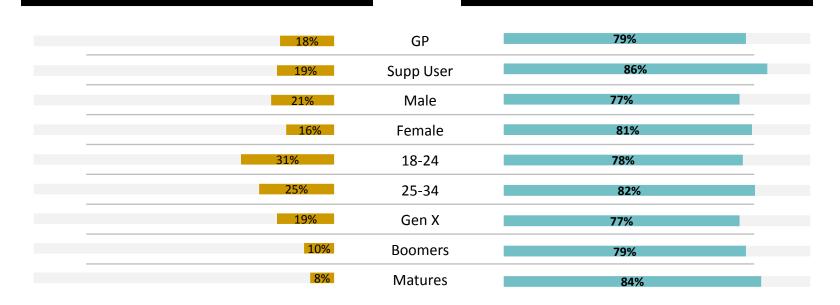


% consumers who completely/somewhat agree...



I only use dietary supplements when I am sick or feel myself getting sick

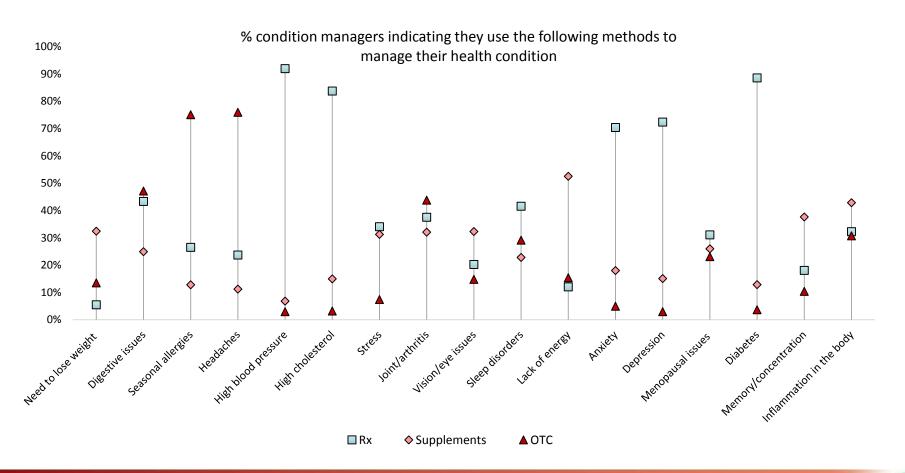
Taking a vitamin/mineral supplements everyday is important to my overall health



Looking across the variety of methods consumers use for condition management, white space opportunities for supplements are revealed.

(Q.71 - % condition managers indicating they use the following methods to manage their health condition)

For example, consumers are mainly using prescription medications to reduce high cholesterol. However, there are many other ways to reduce cholesterol such as with certain foods and supplements. Since consumers are looking for alternatives to prescription medications, high blood pressure, high cholesterol, anxiety, depression, and diabetes are all areas with white space opportunities for alternative solutions.



Ranking conditions across methods "most likely" used for that condition highlights how consumers make discriminating choices, possibly based on factors such as perceived effectiveness, safety, and availability.

(Q.71 - ranked conditions for method used)

Ranked conditions for type of product used among condition managers

Prescription medication	<u>Supplements</u>	<u>Over-the-counter</u>
High blood pressure	Lack of energy	Headaches
Diabetes	Inflammation in the body	Seasonal allergies
High cholesterol	Memory/concentration	Digestive issues
Depression	Need to lose weight	Joint/arthritis
Anxiety	Vision/eye issues	Inflammation in the body
Digestive issues	Joint/arthritis	Sleep disorders
Sleep disorders	Stress	Menopausal issues
Joint/arthritis	Menopausal issues	Lack of energy
Stress	Digestive issues	Vision/eye issues
Inflammation in the body	Sleep disorders	Need to lose weight

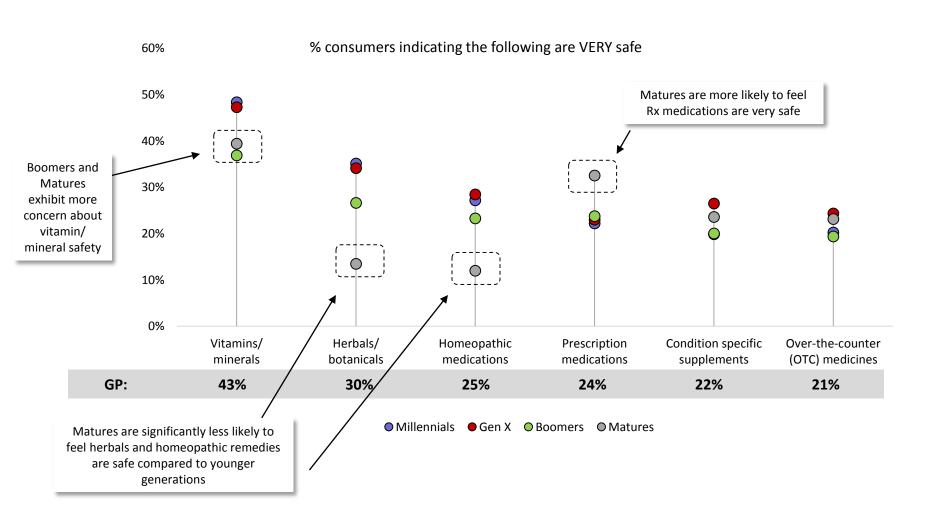
Denotes the condition is unique to the product type

Read: Prescription medication shows the highest use across high blood pressure managers for their condition, followed by diabetes managers, etc.



Across all measured healthcare products, vitamins and minerals are seen as the most safe.

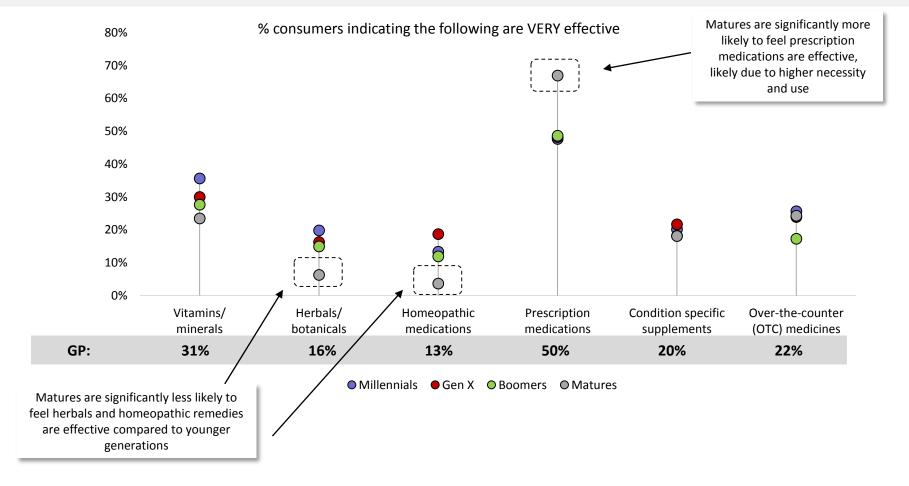
(Q.36 - % consumers indicating they feel the following are very safe)



While prescription medications are not seen as very safe, they are viewed as the most effective.

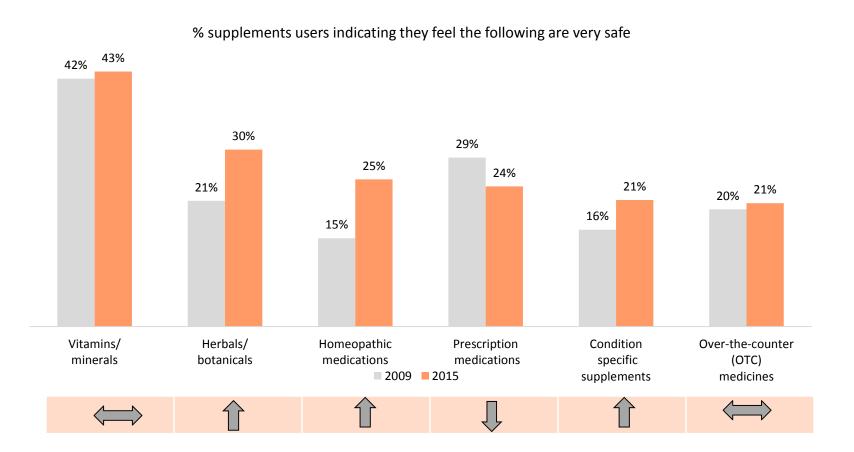
(Q.36 - % consumers indicating they feel the following are very effective)

Safety and effectiveness need not be mutually exclusive. Consumers appear to be challenged by methods which are both effective and safe, highlighting a very clear opportunity for supplement products which fit both parameters.



Safety ratings for herbal, homeopathic and condition specific products have all increased significantly since 2009.

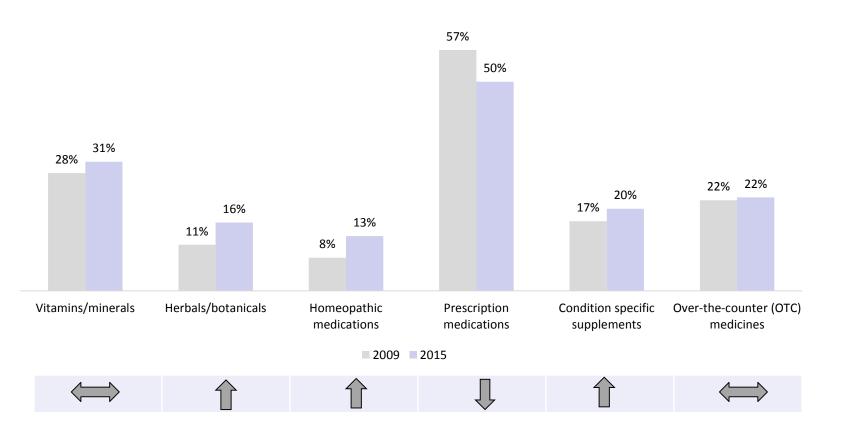
(Q.36 - % supplements users indicating they feel the following are very safe)



Interestingly, perceived effectiveness ratings for herbals and botanicals also increased, while those of Rx declined twelve percent.

(Q.36 - % supplements users indicating they feel the following are very effective)

% supplements users indicating they feel the following are very effective





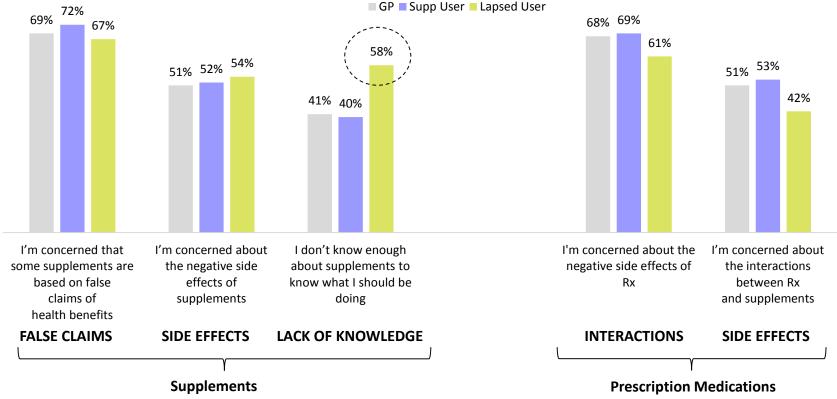
Regardless of the positive or negative perceptions of supplements and Rx, many concerns regarding both persist.

(Q.27/Q.66- % consumers who completely/somewhat agree with the statements)

Skepticism is highly pervasive across supplements regarding their health benefit claims. Oftentimes consumers have to take supplement manufacturers at their word regarding how the supplements will fortify their health without ever being able to actually witness or experience the tangible benefits.

Opportunities exist for supplement companies regarding stronger proof of claims.

% consumers who completely/somewhat agree with the statements



The value of consistent messaging regarding the need for certain nutrients may manifest itself in consumers' perceived deficiencies.

(Q.6 - % consumers indicating they feel they do not get enough of the following nutrients in their diet)

% consumers indicating they feel they do not get enough of the following nutrients in their diet

	<u>GP</u>	Millennials	Gen X	<u>Boomers</u>	<u>Matures</u>
Calcium	39%	99	109	96	99
Vitamin D	32%	82	101	110	132
Fish oil	30%	102	105	92	112
Fiber	28%	101	101	97	109
Iron	25%	118	113	77	87
Omega 3 fatty acids	24%	91	109	106	94
Antioxidants	24%	96	109	102	86
Vitamin C	23%	95	115	98	100
Vitamin B12	22%	93	112	99	108
Probiotics	20%	90	115	109	71
Vitamin B's	16%	84	131	106	77
Protein	14%	143	89	69	67
Vitamin E	14%	91	108	109	81
Folic acid, folate, B9	10%	109	112	87	88
Amino acids	10%	133	135	62	38
Vitamin A (beta-carotene)	9%	101	125	82	117
Lutein	6%	68	91	118	185



Denotes high index vs. GP (≥ 120)

Denotes low index vs. GP (≤ 80)

Concern over absorption of nutrients in supplements is high.

(Q.27/Q.66- % consumers who completely/somewhat agree with the statements)

Clinical proof and verification of the bioavailability and absorption levels of nutrients may help boost consumer confidence.

% consumers who completely/somewhat agree with the statements



CONCERN ABOUT NUTRIENT DEPLETION

"When I take Rx, I'm concerned about nutrients being depleted from my body"

GP: 42%

Supp User: 44%

Rx User: 42%

Millennials: 45%

Gen X: 42%

Boomers: 40%

Matures: 39%



CONCERN ABOUT NUTRIENT ABSORPTION

"Concerned when I take supplements, my body does not absorb enough of the nutrients the supplements are supposed to provide"

GP: 55%

Supp User: 58%

Rx User: 59%

Millennials: 51%

Gen X: 60%

Boomers: 56%

Matures: 54%



DESIRE FOR PROOF OF ABSORPTION

"I would like more clinical proof that the nutrients in the supplements I take are being fully absorbed by my body"

GP: 69%

Supp User: 72%

Rx User: 73%

Millennials: 67%

Gen X: 71%

Boomers: 71%

Matures: 71%

Significantly

Interest in tests to measure both nutrient deficiencies and personalized nutrition needs is high.

(Q.47- % consumers who are very/somewhat interested in the following tests)

Testing may help validate both the tangibility of absorption and the effectiveness of the nutrient and thereby increase the buy-in for health benefit claims.

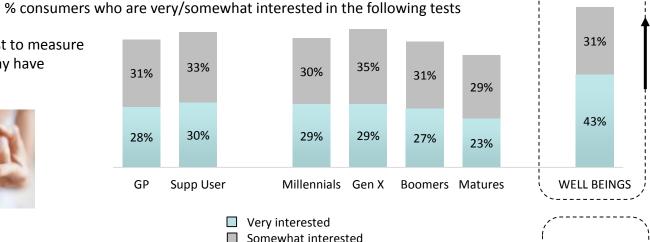
Interest in a home blood test to measure

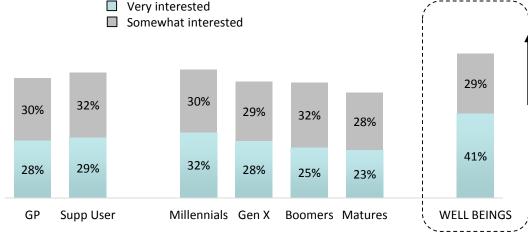
nutrient deficiencies you may have



 Interest in a DNA test to determine your personalized nutrition needs







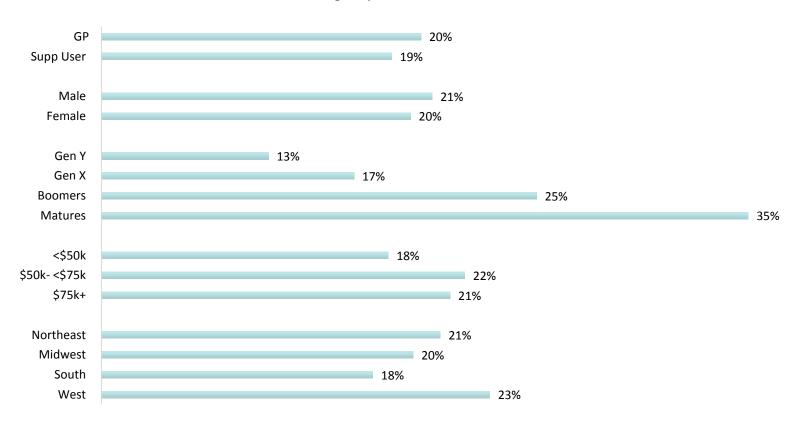


In-store wellness clinics would provide consumers with quick, convenient and easy access to health tests and health advice... one way to increase consumer engagement.

(Q. 67 - % consumers indicating they are interested in wellness clinics in stores – top 2 box on a 7 pt. scale of interest)

In-store clinics with licensed nurse practitioners can help consumers with their health concerns, nutritional advice, prescriptions for minor health issues, and even basic medical testing. The service would allow consumers a convenient and consistent way to get the information, testing, and advice they need to stay on a healthy path.

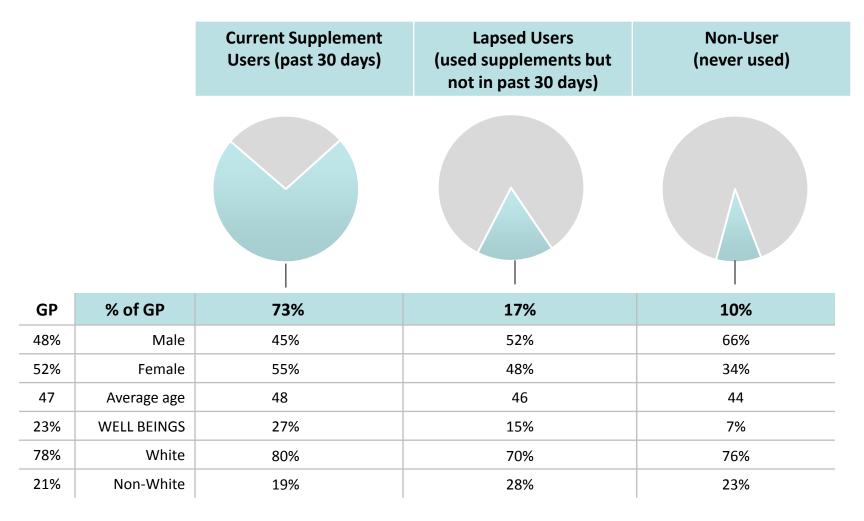
% consumers indicating they are interested in wellness clinics in stores





SUPPLEMENT MARKET LANDSCAPE

One in ten adults have never used a supplement; these non-users skew male, younger, with lower membership in the WELL BEINGS segment.



READ: 45% of current supplement users are male, whereas 66% of non-users are male

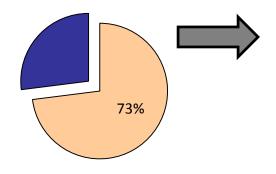


Recent supplement use, within the past thirty days, has grown eighteen percent over the past six years.

(Q.1 - %) general population indicating they have used the following products in the past 30 days)

% general population indicating they have used the following products in the past 30 days

% general population who used supplements in past 30 days



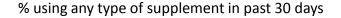


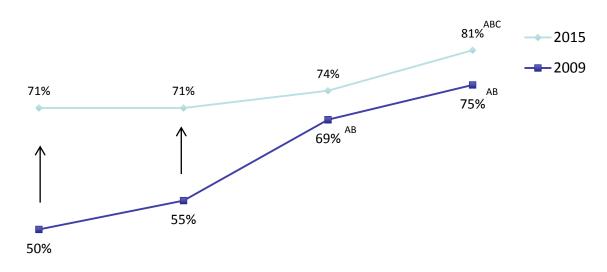
	% GP 2009	% GP 2011	% GP 2013	% GP 2015	
Current supplement users (past 30 days)	62%	65%	73%	73%	†
Vitamin/mineral (net)	57%	60%	68%	68%	†
Multivitamins/minerals	48%	50%	56%	55%	†
Single vitamins	23%	29%	37%	38%	†
Single minerals	13%	18%	19%	19%	†
Other (net)	29%	34%	38%	40%	†
Other supplements (i.e., Omega 3, lutein)	15%	20%	24%	24%	†
Condition specific	11%	14%	14%	14%	‡
Herbal supplements	11%	12%	16%	17%	†
Homeopathic medicines	5%	6%	8%	10%	†
Ayurvedic remedies	1%	2%	3%	2%	†



Overall supplement use has increased among all generations with Millennials showing the largest growth, increasing 36% from 2009.

(Q1. - % consumers indicating they have used the following products in the past 30 days)





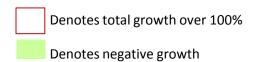
Millennials	Gen X	Boomers	Matures
(A)	(B)	(c)	(D)

The growth in supplement usage among Millennials is across an array of supplement categories, revealing the potential within this youngest generation.

(Q.1 - % general population indicating they have used the following products in the past 30 days)

% general population indicating they have used the following in the past 30 days

		<u>Millennia</u>	<u>ls</u>		Gen X			<u>Boomers</u>			Matures	
	2009	2015	Total growth	2009	2015	Total growth	2009	2013	Total growth	2009	2013	Total growth
	(%)	(%)		(%)	(%)		(%)	(%)		(%)	(%)	
Vitamin/mineral users (net)	46	65	41%	51	68	33%	64	70	9%	70	76	9%
Multivitamins	39	55	41%	44	56	27%	52	53	2%	59	56	-5%
Single vitamins	13	32	146%	19	35	84%	27	42	56%	35	52	49%
Single minerals	7	17	143%	10	16	60%	17	22	29%	17	25	47%
Other supplements (net)	16	39	144%	24	39	61%	35	40	14%	43	47	9%
Herbal/botanical	8	20	150%	10	19	90%	12	14	17%	13	11	-15%
Condition specific	2	14	600%	6	13	117%	16	14	-13%	21	20	-5%
Other (e.g. Omega, etc.)	8	19	138%	11	25	127%	20	26	30%	23	33	43%





Taking a closer look at leading and trailing edge Millennials reveals the 25-38 year olds are most responsible for driving increased usage.

(Q.1 - % millennials indicating they have used the following products in the past 30 days)



% age groups within millennials indicating they have used the following products in the past 30 days



18-24 year olds

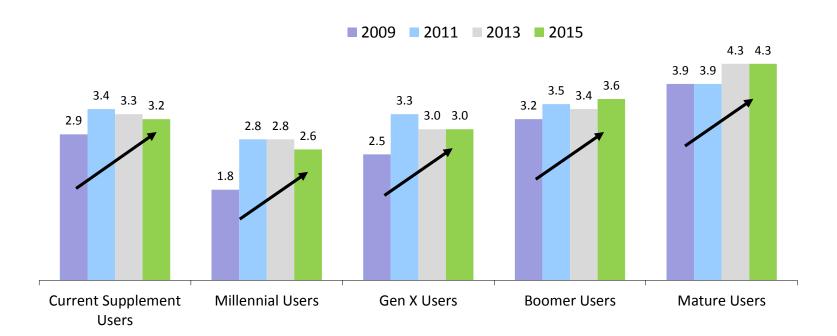
25-38 year olds

55%	Vitamin/mineral supplements (net)	70%
45%	Multivitamins/minerals	60%
22%	Single vitamins	35%
10%	Single minerals	19%
27%	Other (net)	44%
16%	Herbal supplementss	21%
9%	Condition specific	16%
12%	Other supplements (e.g., Omega 3s)	22%

Since 2009, the average number of different supplement types used in a typical day has increased across all generations.

(Q.3 – average number of different types of supplements current supplement users use in a typical day)

Average number of different types of supplements current supplement users use in a typical day

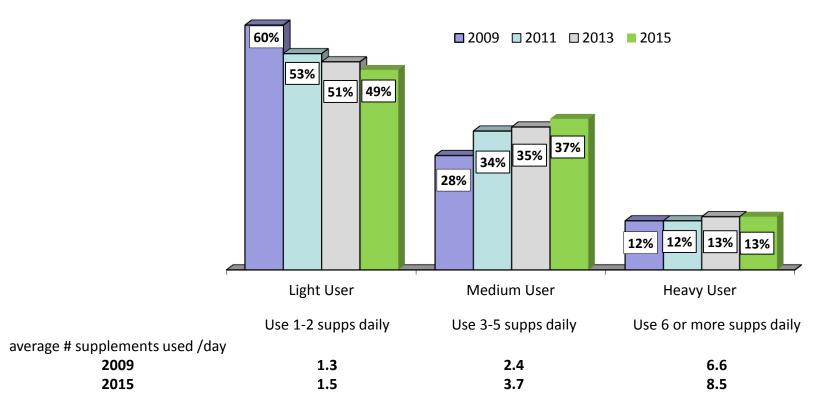




Even further, it appears that "light users" are migrating toward "medium" usage, and medium and heavy users are increasing their daily supplement consumption by at least one more supplement a day.

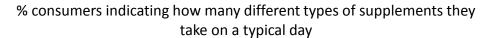
(Q.3 – % Current Supplement Users indicating how many different types of supplements they take on a typical day)

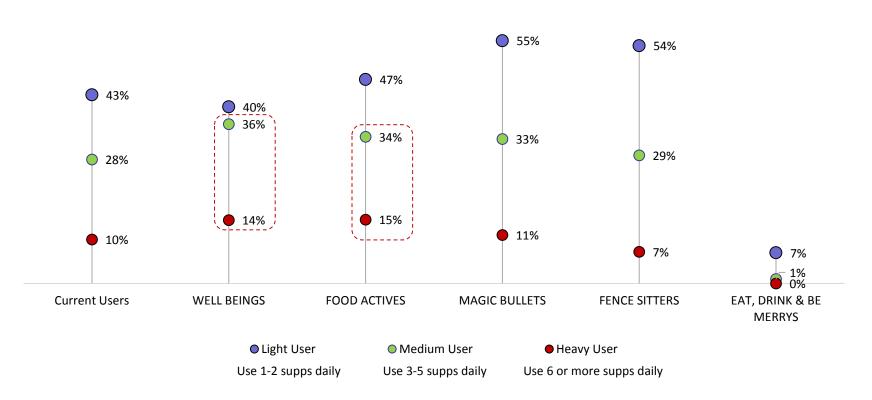
% Current supplement users indicating how many different types of supplements they take on a typical day



WELL BEINGS and FOOD ACTIVES index high against all current supplement users for medium and heavy daily supplement usage.

(Q.3 – % consumers indicating how many different types of supplements they take on a typical day)

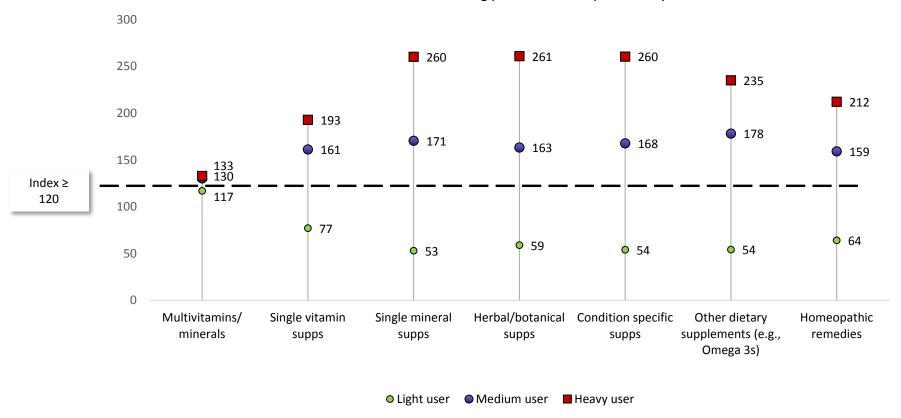




Perhaps not surprising, Heavy and Medium Users index high across an array of supplement categories.

(Q.1 – Index of Type of User vs. Supplement Users indicating they have used the following products in the past 30 days)

Index of Type of User vs. ALL Supplement Users indicating they have used the following products in the past 30 days



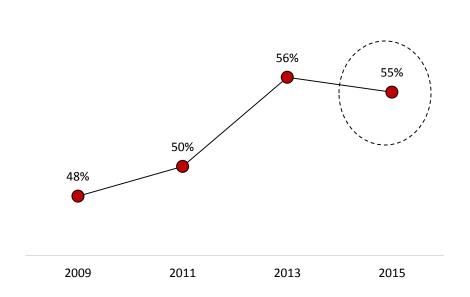
Read as: Almost twice as many Heavy users (index=193) are using single vitamins compared to total supplement users



Multivitamin use has also increased over the past six years; driven by the youngest generations, the Millennials and Gen X.

(Q.1 – % general population using a multivitamin/mineral)

% general population indicating they have used multivitamins in the past 30 days



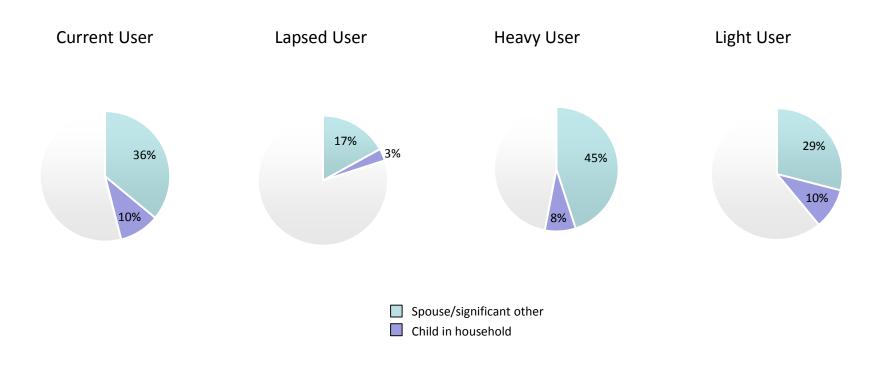
	2009	2015	
18-29	39%	50%	Significant
30-39	38%	62%	increases
40-49	53%	57%	
50-64	52%	53%	
65+	60%	55%	

It appears that supplement usage by other household members has a positive impact on usage across all family members.

(Q.17 - % supplement users indicating who else in their household are using supplements)

In other words, over a third of current supplement users (36%) have a spouse or significant other who also uses supplements. Conversely, only 17% of Lapsed Users have a spouse or significant other currently using supplements. There may be opportunities for brands to use this information in marketing campaigns or to cross sell supplements to other family members.

% supplement users indicating who else in their household are using supplements



In addition, longevity of use is supported by having a spouse or significant other who also uses.

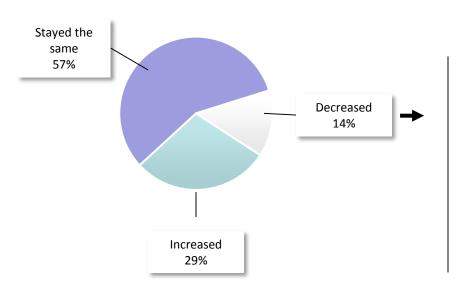
New users show significantly higher concern about negative side effects and compromised supplement content in addition to a lack of knowledge about supplements in general. Educational messaging should always be part of any marketing campaign for supplements in order to reach all types of supplement users and boost compliance.

	New users	Long-term users
# of supps/day:	2.1	3.8
Spouse/sig other uses supplements:	27%	40%
Concerned about the negative side effects of supplements	/59%\ /	49%
Indicate they don't know enough about dietary supplements to know what they should be using	43%	30%
Prefer their dietary supplements to be in pill form rather than formulated into the foods they eat	49%	43%
Do not know how to tell which brands of dietary supplements are high quality	46%	38%
Are concerned that the supplements they use may contain a higher level of nutrients than what is listed on the label	32%	21%
Believe well-known national brands of dietary supplements have to meet higher standards of quality	47%	37%

While the majority of use has remained stable over the past few years, a portion (14%) have decreased their usage mainly through purchasing fewer types and lowered daily compliance.

(Q.32/Q.33 - % supplement users indicating if their supplement usage has increased, decreased, stayed the same over the past few years/% current supplement users indicating why their usage has decreased)

% supplement users indicating, over the last few years, their usage of supplements has...



% supplement users [who said their usage decreased] indicating how their usage decreased...

• I purchase fewer types of supplements overall	54%
• I'm less likely to take them on a daily basis	42%
I purchase less expensive supplements	24%
I've limited my purchases to mainly multivitamins	23%
• I am less likely to try new supplements I learn about	22%
I have switched to store brand supplements	12%
I take a lower dosage	8%
 I have changed from buying supplements in a store to buying them online 	6%



Users who have decreased their usage may be brought back through food-type forms and consistent reassurance of safety and effectiveness.

(Q.5/Q.31/Q.34 - % supplement users who completely/somewhat agree with the statements)

% supplement users who completely/somewhat agree with the statements



No gender or age differences between groups



Supplement users who have <u>increased</u> usage are <u>significantly</u> <u>more likely</u> than those who have decreased usage to indicate...

- ✓ They believe they can manage many of their health issues by taking vitamins, minerals, and other supplements (70% vs. 41%, increased vs. decreased, respectively)
- ✓ Taking a vitamin/mineral supplement everyday is important to their overall health (68% vs. 33%) Completely agree
- ✓ They purchase the highest quality supplements even if they cost more (54% vs. 27%)
- ✓ They know a lot about supplements and are confident in using them (52% vs. 21%)
- ✓ They are more likely to be a WELL BEINGS or MAGIC BULLETS

Supplement users who have <u>decreased</u> usage are <u>significantly more</u> <u>likely</u> than those who have increased usage to indicate...

- ✓ They prefer to get all their daily nutritional requirements in the foods they eat, rather than have to take additional supplements (77% vs. 61%, decreased vs. increased, respectively)
- ✓ They're concerned about the negative side effects of dietary supplements (63% vs. 54%)
- ✓ Vitamins/minerals are not "very" safe (63% vs. 48%)
- ✓ Vitamins/minerals are not "very" effective (78% vs. 55%)
- ✓ They are more likely to be EAT, DRINK & BE MERRYS

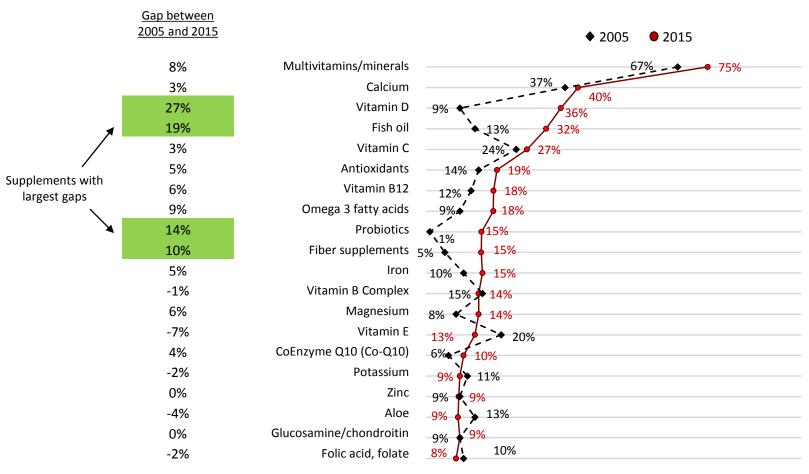




Multivitamins/minerals are still the most highly used supplements, but Vitamin D, Fish oil, Probiotics, and Fiber show highest growth.

(Q.1 /Q.8-% current supplement users using a multivitamin/mineral/% current supplement users indicating they have used the following)

% current supplement users indicating they have used the following



Since 2005, aloe, folic acid, glucosamine and zinc have dropped out of the top 15 list of most used supplements.

(Q.8 – Ranked order of supplements used by current supplement users in past 30 days)

Ranked order of supplements used by current supplement users in past 30 days

<u>2005</u>	<u>2015</u>
Calcium	Calcium
Vitamin C	Vitamin D
Vitamin E	Fish oil
Vitamin B-complex	Vitamin C
Antioxidants	Antioxidants
Aloe	Vitamin B12
Fish Oil	Omega 3 fatty acids
Vitamin B12	Probiotics
Potassium	Fiber supplements
Iron	Iron
Folic acid, folate	Vitamin B Complex
Glucosamine/Chondroitin	Magnesium
Vitamin D	Vitamin E
Zinc	CoEnzyme Q10 (Co-Q10)
Omega-3 fatty acids	Potassium
Denotes the suppler	nents do not show up in the

top 15 of the corresponding year's list



In 2015, some of the supplements which have <u>moved up the list include:</u>

- Fish oil
- · Vitamin D
- Omega 3 fatty acids
- Probiotics
- Fiber supplements
- Magnesium
- CoEnzyme Q10

In 2015, some of the supplements which have fallen down the list include:

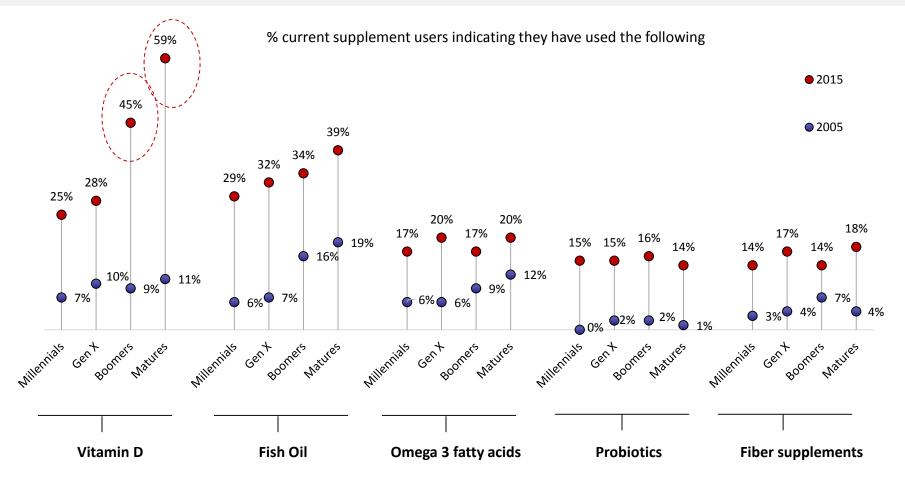
- Vitamin E
- Vitamin B complex
- Aloe
- Potassium
- Folic Acid, folate
- Glucosamine/Chondroitin
- Zinc



It appears that <u>all</u> generations are contributing to the growth of the top listed supplements.

(Q.1/Q.8-% current supplement users using a multivitamin/mineral/% current supplement users indicating they have used the following)

Boomers and Matures are specifically driving the increase in Vitamin D use which is good news considering Vitamin D aids in the maintenance of healthy bones and teeth, and is suggested to protect against multiple diseases and conditions such as cancer, type 1 diabetes, and multiple sclerosis.



The top 5 supplements used by males and females are the same.

(Q.1 /Q.8-% current supplement users using a multivitamin/mineral/% current supplement users indicating they have used the following)

% current supplement users indicating they have used the following





MALES (4)
---------	----

• •	
Multivitamins/minerals	62%
Fish oil	37% ^B
Vitamin D	33%
Calcium	31%
Vitamin C	31% ^B
Antioxidants	23% ^B
Omega 3 fatty acids	23% ^B
Vitamin B12	19%
Fiber supplements	16%
Vitamin E	15%
Iron	15%
Vitamin B Complex	14%

FEMALES (B)

Multivitamins/minerals	60%
Calcium	48% ^A
Vitamin D	38%
Fish oil	28%
Vitamin C	24%
Probiotics	20% ^A
Vitamin B12	17%
Antioxidants	15%
Magnesium	15%
Iron	15%
Vitamin B Complex	14%
Omega 3 fatty acids	14%

Denotes supplements that are unique to specific gender Capital letters denote significant differences between groups at the 95% level



Some variations in supplement use exist across the generations' top ten list of most used supplements.

(Q.1/Q.8-% current supplement users using a multivitamin/mineral/% current supplement users indicating they have used the following)

Top ten supplements used by each generation

<u>Millennials</u>	Gen X	Boomers	<u>Matures</u>
Calcium	Calcium	Vitamin D	Vitamin D
Fish oil	Fish oil	Calcium	Calcium
Vitamin C	Vitamin C	Fish oil	Fish oil
Vitamin D	Vitamin D	Vitamin C	Vitamin C
Antioxidants	Omega 3 fatty acids	Vitamin B12	Vitamin B12
Iron	Antioxidants	Antioxidants	Omega 3 fatty acids
Omega 3 fatty acids	Fiber supplements	Magnesium	Magnesium
Amino acids	Vitamin B Complex	Omega 3 fatty acids	Fiber supplements
Vitamin B12	Vitamin E	Vitamin B Complex	CoEnzyme Q10 (Co-Q10)
Aloe	Vitamin B12	Probiotics	Probiotics
Among only Gen X and Matures top 10			



Denotes supplements that are unique to specific generation

Among only Gen X and Boomers top 10Among only Boomers and Matures top 10

Channel shoppers also show some interesting variations in level of use of the top supplements.

(Q.1 /Q.8- % current supplement users using a multivitamin/mineral/% current supplement users indicating they have used the following supplements)



Index of channel shoppers vs. current shoppers who shop the following channels most often for supplements based on which supplements they use

	Current supplement users	Internet Shoppers	Natural Channel Shoppers	Mainstream Channel Shoppers	Specialty Shoppers
Multivitamins/minerals	75%	100	86	87	65
Calcium	40%	105	111	96	107
Vitamin D	36%	79	113	92	149
Fish oil	32%	123	113	96	122
Vitamin C	27%	101	128	90	125
Antioxidants	19%	136	175	77	132
Vitamin B12	18%	111	133	90	125
Omega 3 fatty acids	18%	151	129	85	154
Probiotics	15%	170	148	83	122
Fiber supplements	15%	134	147	91	76
Iron	15%	120	149	88	157
Vitamin B Complex	14%	162	160	74	175
Magnesium	14%	166	139	79	175
Vitamin E	13%	106	134	84	158
CoEnzyme Q10 (Co-Q10)	10%	209	130	82	167

Denotes high index (≥ 120)



Denotes very high index (≥ 150)

Many emerging supplements still show very low usage; continued education about benefits may be necessary.

(Q.8 - % current supplement users indicating they have used the following)

While several of the supplements on this list may be very condition specific or used only during certain times such as Echinacea and Saw Palmetto, there are also some that are highly beneficial on a more consistent basis. Supplements such as niacin, vitamin K, prebiotics and resveratrol all have very valuable benefits regarding disease prevention and body fortification. More education is needed across many of these low usage supplements to equip consumers with the knowledge of how the supplements can benefit them and help them reach their health goals.

% current supplement users indicating they have used the following – of the supplements measured, these are used by the fewest number of consumers

Acai	4.1%
Niacin	4.1%
Echinacea	3.9%
Ginkgo biloba	3.7%
Vitamin K	3.3%
DHEA	3.2%
Krill Oil	3.2%
Collagen	3.1%
lodine	3.0%
Milk Thistle	2.9%
Soy protein	2.7%
Plant-based protein	2.7%
MSM	2.7%
DHA	2.6%
Selenium	2.5%
Grape seed extract	2.5%

Lycopene	2.4%
Prebiotics	2.3%
Saw Palmetto	2.2%
Omega 6/9 fatty acids	2.2%
St. John's Wort	1.8%
Hyaluronic acid	1.7%
Choline	1.2%
Astaxanthin/zeaxanthin	0.9%
Resveratrol	0.8%
EHA	0.7%
SAM-e	0.7%
Plant sterols/stanols	0.7%
Peptides	0.6%

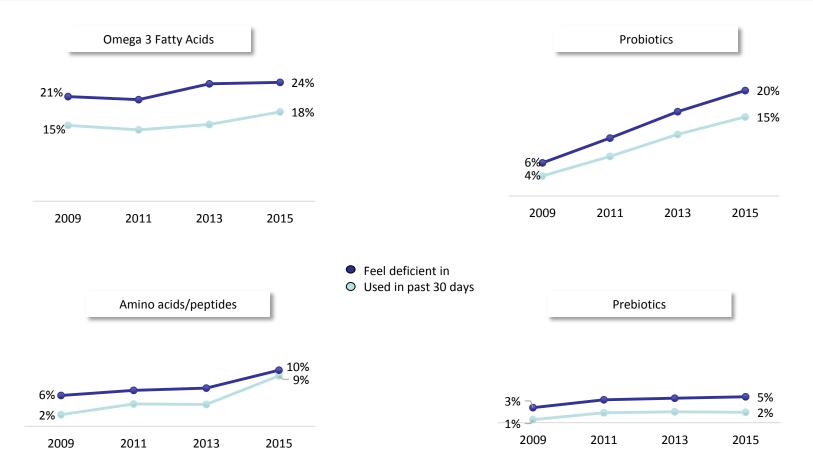


Use of emerging supplements may in part be driven by perceptions of nutrient deficiency.

(Q.6/Q.8 - % general population who feel deficient in nutrient/% current supplement users indicating they have used the following supplements)

Media coverage of many of these emerging supplements may be driving increases in perceived deficiencies and therefore driving higher usage.

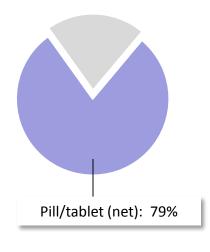
As just stated, continued education regarding the benefits of certain nutrients will create consumer need and in turn, increase usage.



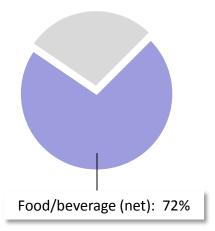
Known for its spectrum of health benefits, from brain health to inflammation reduction, Omega 3 usage across product types is high; opportunities exist for continued expansion across an array of products.

(Q.10 – % Omega 3 users indicating what type of omega product they use)

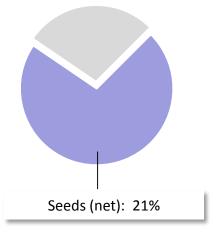
% Omega 3 users indicating what type of omega 3 product they use



Pill/capsule/tablet	51%
Liquid/gel supplement	29%
Chewable supplement	11%



Fish (salmon, sardines, etc).	49%
Eggs	38%
Nuts	36%
Grain products (cereals, breads, etc.)	21%
Dairy products fortified with Omega 3 (milk, cheese, etc.)	19%



Flax seeds	18%
Chia seed	10%



Probiotics are viewed as both a supplement and a digestive aid; as such, consumers are split on where, in the store, they prefer to find them.

(Q.13 –% probiotic users indicating in which section of the store they prefer to find them)

% Probiotic users indicating in which section of the store they prefer to find them

Supplement section 41%



Digestive aid section 35%



Doesn't matter 24%



Digestive mgr.: 37%

Grocery Shopper: 48%

Mass merchandiser shopper: 46%

Drug store shopper: 42%

Natural channel shopper: 41%

Digestive mgr.: 38%

Grocery Shopper: 31%

Mass merchandiser shopper: 29%

Drug store shopper: 36%

Natural channel shopper: 34%

Digestive mgr.: 25%

Grocery Shopper: 22%

Mass merchandiser shopper: 25%

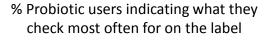
Drug store shopper: 23%

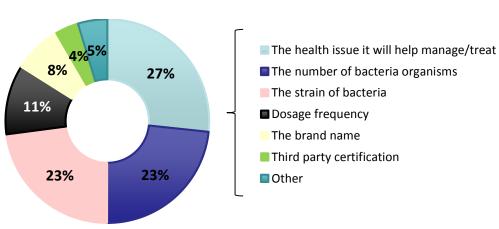
Natural channel shopper: 25%

While almost a quarter of Probiotic users indicate they check the label for the number of bacteria organisms, many are unclear about what the optimal number of organisms should be.

(Q.11/Q.12/Q.13 - % Probiotic users indicating what they check most often for on the label/% probiotic users indicating what strain count they prefer/% probiotic users indicating in which section of the store they prefer to find them)

Once again, consumers exhibit a lack of knowledge about a very important supplement product — probiotics. While they realize it is important to supplement their diet with probiotics, strains and bacteria count are still causing confusion. For probiotic products wishing to tout specific attributes, it will be imperative to continually message about the benefits of the certain strain and the bacteria count in order to differentiate their product.





% Probiotic users indicating what strain count they prefer

1 billion	8%
5 billion	11%
10 billion	20%
20 billion	14%

Don't know 44%

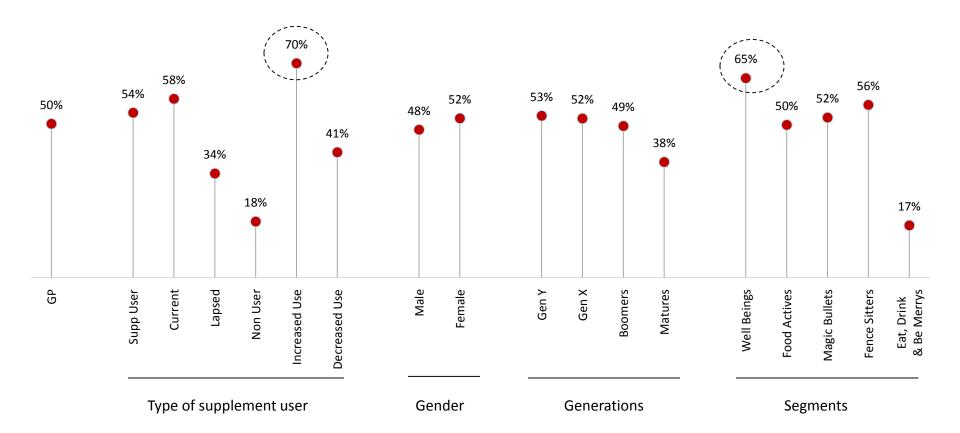




Consumer confidence is high regarding how supplements can fortify health and help manage many conditions.

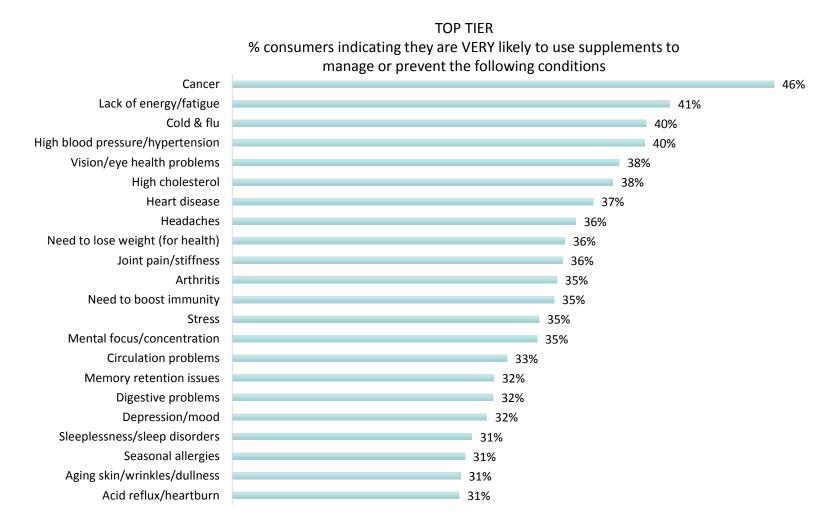
(Q.31 – % consumers who completely/somewhat agree with the following statement)

% consumers who completely/somewhat agree... they believe they can manage many of their health issues by taking vitamins, minerals and other supplements



In fact, consumers show high likelihood to use supplements to manage and prevent a whole host of conditions.

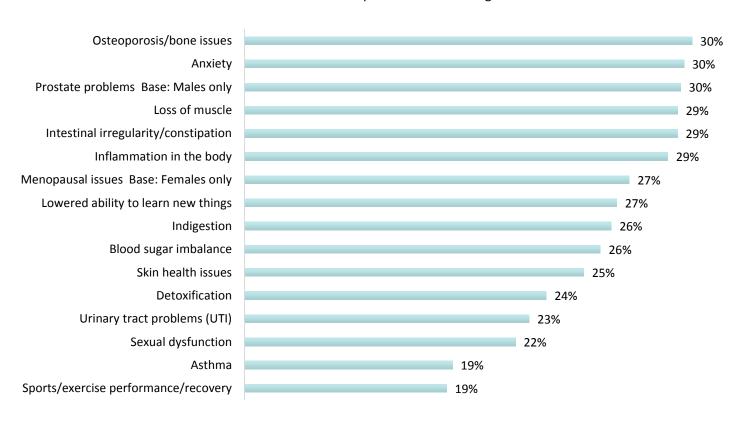
(Q.7 – % consumers indicating they are very likely to use supplements to manage or prevent the following conditions)



However, consumers report less likelihood to use supplements for conditions which are less prevalent across the population.

(Q.7 – % consumers indicating they are very likely to use supplements to manage or prevent the following conditions)

BOTTOM TIER
% consumers indicating they are VERY likely to use supplements to manage or prevent the following conditions

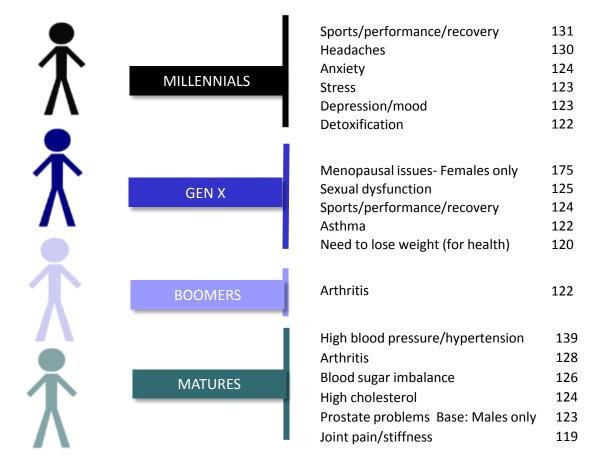




Generations have different need states therefore their use of supplements are varied, predicated on those needs.

(Q.7 – Index of consumers vs. GP indicating they are very likely to use supplements to manage or prevent the following conditions)

Index of consumers vs. GP indicating they are very likely to use supplements to manage or prevent the following conditions



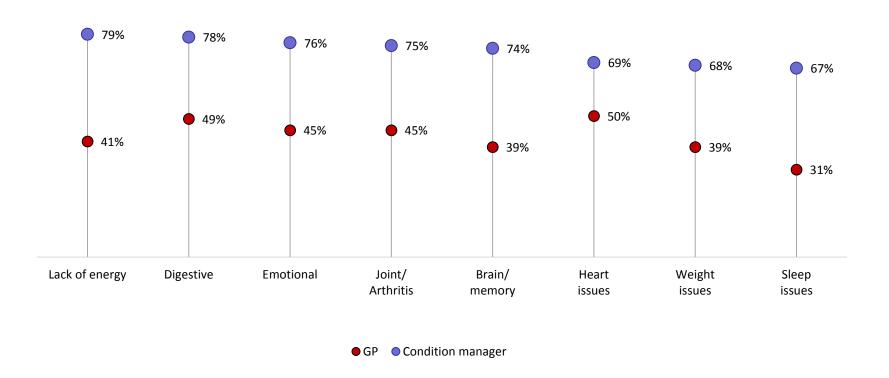


While it may seem obvious, condition managers have higher likelihood to use supplements to manage their condition; but this has implications for marketing, positioning and communications.

(Q.7 – % consumers indicating they are very likely to use supplements to manage or prevent the following conditions)

In other words, a Digestive manager is highly likely to use a supplement to manage or prevent digestive issues. Therefore, it is important to profile these likely consumers in order to create more targeted products and messaging. Are they educated about their digestive system? Do they know what products are best for their condition? Do they suffer from other issues and therefore are they looking for a product which has dual benefits? Understanding the target will help manufacturers differentiate their product and expand their reach.

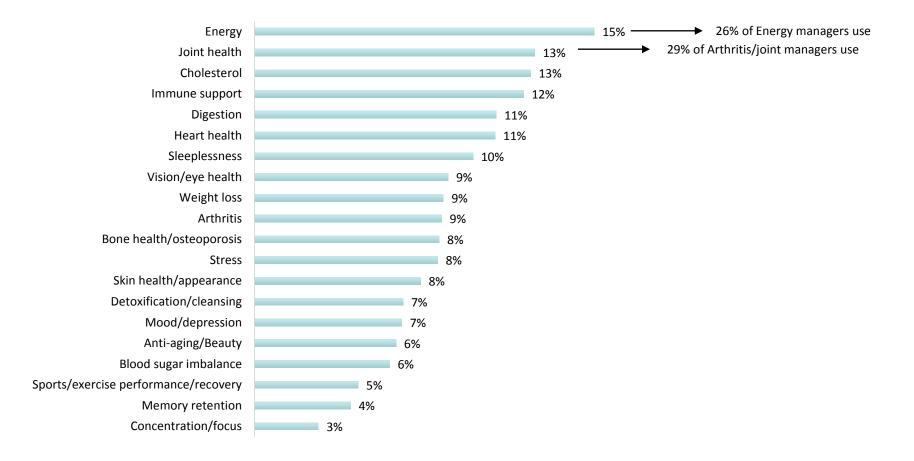
% consumers indicating they are very likely to use supplements to manage or prevent the following conditions



Reported use of condition specific supplements appears low across the general population, but penetration increases when benefits are driven by need instead of prevention.

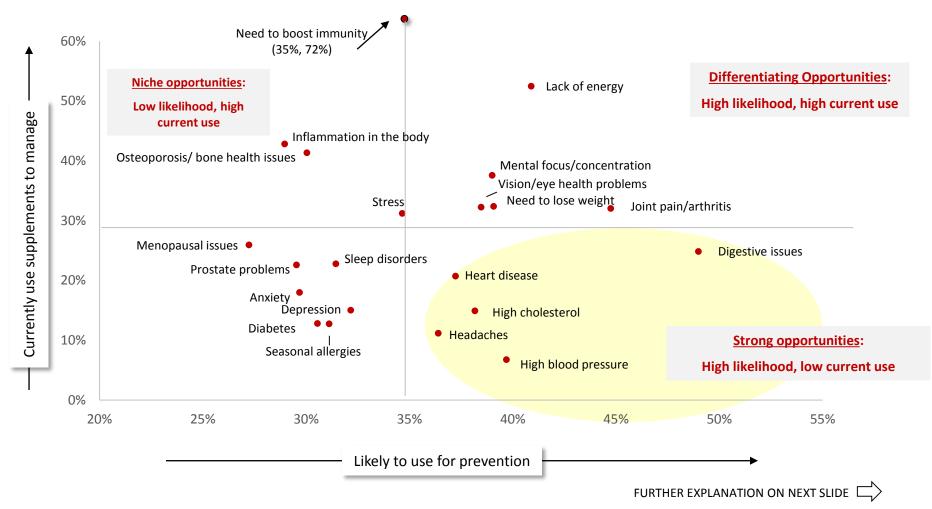
(Q.9 – % consumers indicating they have used the following condition specific supplements in the past 30 days)

% consumers indicating they have used the following condition specific supplements in the past 30 days



By looking at current use of supplements for specific condition management, in relation to likelihood to use for prevention, white space opportunities are revealed.

(Q.71 - % condition managers indicating they use supplements to manage their health condition /Q.7 - % general population indicating they are very likely to use supplements to manage or prevent the following conditions)



Understanding how to address these opportunities is key to meeting current needs, and to create engaging, targeted messaging.

Strong opportunities:

High likelihood to use, low current use

- Digestive issues
- Heart disease
- High cholesterol
- Headaches
- High blood pressure

Consumers show high likelihood to use supplements for these conditions but managers show actual low use. Do managers feel the available supplements are just not effective? Do they feel that these issue are too serious to use supplements to manage? These are strong opportunities for current and emerging supplement products to address since consumers show high likelihood to embrace supplements for management.

Differentiating Opportunities:

High likelihood, high current use

- Lack of energy
- Mental focus/concentration
- Vision/eye health issues
- Need to lose weight
- Joint pain/arthritis

Because consumers show both high likelihood to use supplements to manage these conditions and current managers are also showing high use, a supplement product addressing these issues would be most successful by differentiating itself in some way as to create increased buy-in and stronger brand loyalty across condition managers.

Niche Opportunities:

Low likelihood, high current use

- Need to boost immunity
- Inflammation in the body
- Osteoporosis/bone health issues
- Stress

Since condition managers are showing high use of supplements for these conditions, but consumers in general show low likelihood to use, these are niche opportunities. Immunity, stress, and inflammation are not clearly defined disease states. However, not only are they prevalent across the population but they are also conditions which are precursors to other, more serious conditions. Getting consumers on board with supplementation as a means to proactively prevent or manage these conditions may help suppress future illness or disease.



The next few slides illustrate the opportunity gap among condition managers and the supplements they use and, conversely, which supplements are being used to manage the same condition.

(Q.18/Q.8 – % supplement users indicating they are trying to prevent/treat heart conditions with the following supplements/% heart managers [who use supplements] indicating what supplements they use)

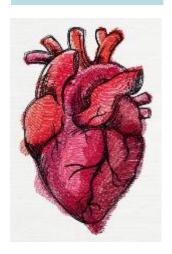
In other words, it is important to understand what supplements, for example, a Heart condition manager is using. However, it is also important to know which supplements consumers are using to manage heart conditions. For instance, Heart managers are primarily using a multivitamin/mineral and Vitamin D, but about half of Fish and Krill oil users and Omega 3 users are using the supplements to manage heart issues. Opportunities still exist to expand usage of Omega 3, Krill and Fish Oil across the larger target of Heart managers.

% Heart managers indicate they are using the following supplements:

Multivitamin/mineral	50%
Vitamin D	46%
Calcium	41%
Fish oil	38%
Vitamin C	28%
Vitamin B12	22%
Omega 3 fatty acids	21%
Fiber supplements	18%
Magnesium	18%
Antioxidants	18%
Vitamin B Complex	16%
Probiotics	15%

Only supplements used by 15% or more of managers are listed

HEART HEALTH



Gray shading highlights supplements on both lists

% Consumers who use the following are using to manage heart issues:

Krill Oil	58%
EHA	58%
Omega 6/9 fatty acids	48%
Fish oil	46%
Omega 3 fatty acids	45%
CoEnzyme Q10 (Co-Q10)	44%
Garlic supplements	41%
Plant sterols/stanols	38%
Niacin	35%
Antioxidants	30%

Read: 58% of consumers who use Krill Oil are using it to treat or prevent heart issues



One in four Digestive managers are on board with probiotics and fiber; however, digestive enzymes appear to be a niche opportunity which could be expanded to the digestive manager audience.

(Q.18/Q.8 – % supplement users indicating they are trying to prevent/treat digestive conditions with the following supplements/% digestive managers [who use supplements] indicating what supplements they use)

% Digestive managers indicate they are using the following supplements

Multivitamin/mineral	51%
Vitamin D	44%
Calcium	44%
Fish oil	32%
Vitamin C	30%
Probiotics	24%
Fiber supplements	22%
Vitamin B12	21%
Antioxidants	21%
Magnesium	19%
Omega 3 fatty acids	19%
Iron	18%
Vitamin B Complex	15%

Only supplements used by 15% more of managers are listed

DIGESTIVE HEALTH



Gray shading highlights supplements on both lists

% Consumers who use the following are using to manage digestive issues

Digestive enzymes	77%
Probiotics	70%
Fiber supplements	67%
Prebiotics	66%
EHA	63%
Peptides	44%
Choline	35%
Flaxseed	29%
Collagen	28%
Antioxidants	28%

Read: 77% of consumers who use Digestive enzymes are using it to treat or prevent digestive issues



"Losing brain capacity" was found to be the number one fear of aging according to NMI's 2015 Healthy Aging Study highlighting the strong opportunity which exists for brain health supplements.

(Q.18/Q.8 – % supplement users indicating they are trying to prevent/treat brain health with the following supplements/% brain health managers [who use supplements] indicating what supplements they use)

It appears brain health managers do not really have a strong understanding of which are the best supplements for brain health, highlighting a wide open opportunity for a brain health supplement with strong educational messaging.

% Brain health managers indicate they are using the following supplements

Multivitamin/mineral	65%
Calcium	52%
Fish oil	43%
Vitamin D	40%
Omega 3 fatty acids	36%
Vitamin C	36%
Iron	34%
Vitamin B Complex	30%
Vitamin B12	30%
Antioxidants	25%
Vitamin E	23%
Fiber supplements	22%
Magnesium	21%
Amino acids	21%
Probiotics	20%
Zinc	17%
Vitamin B6	17%
CoEnzyme Q10 (Co-Q10)	16%

Only supplements used by 15% more of managers are listed

BRAIN HEALTH



% Consumers who use the following are using to manage brain health issues

Ginkgo biloba	44%
Choline	31%
DHA	20%
St. John's Wort	16%
Resveratrol	15%
SAM-e	15%
Collagen	14%
Ginseng	13%
Iodine	13%
Astaxanthin/zeaxanthin	13%

Read: 44% of consumers who use Ginkgo biloba are using it to treat or prevent brain health issues



Joint health managers appear to be in the know about the benefits of supplements such as fish oil, omega 3 and glucosamine; however, expansion opportunities exist for hyaluronic acid, MSM and curcumin.

(Q.18/Q.8 – % supplement users indicating they are trying to prevent/treat arthritis/joint issues with the following supplements/% arthritis/joint health managers [who use supplements] indicating what supplements they use)

% Arthritis/joint health managers indicate they are using the following supplements

Multivitamin/mineral 49% Vitamin D 45% 45% Calcium Fish oil 35% Vitamin C 29% Omega 3 fatty acids 24% Vitamin B12 22% Antioxidants 21% Glucosamine/chondroitin 19% **Probiotics** 19% Iron 18% Magnesium 18% Vitamin B Complex 18% Fiber supplements 17% Vitamin F 16%

Only supplements used by 15% more of managers are listed

JOINT HEALTH/ARTHRITIS



% Consumers who use the following are using to manage or prevent arthritis/joint health issues

Glucosamine/chondroitin	80%
MSM	79%
SAM-e	60%
Hyaluronic acid	51%
Curcumin/Turmeric	36%
EHA	35%
Astaxanthin/zeaxanthin	30%
Calcium	27%
Collagen	26%
Choline	23%

Read: 79% of consumers who use MSM are using it to treat or prevent arthritis or joint issues



The field of anti-aging regarding physical appearance and skin aging is poised for explosive growth as this spectrum spans all generations.

(Q.18/Q.8 – % supplement users indicating they are trying to prevent/treat aging skin/ wrinkles/ sagging with the following supplements/% anti-aging managers [who use supplements] indicating what supplements they use)

% Anti-aging managers indicate they are using the following supplements

Multivitamin/mineral	51%
Calcium	50%
Vitamin D	37%
Fish oil	36%
Vitamin C	29%
Antioxidants	25%
Omega 3 fatty acids	21%
Fiber supplements	20%
Probiotics	19%
Vitamin B12	19%
Magnesium	17%
Iron	16%
Vitamin B Complex	16%
Vitamin E	15%

Only supplements used by 15% more of managers are listed

ANTI-AGING



% Consumers who use the following are using to manage or prevent aging skin/wrinkles/sagging skin

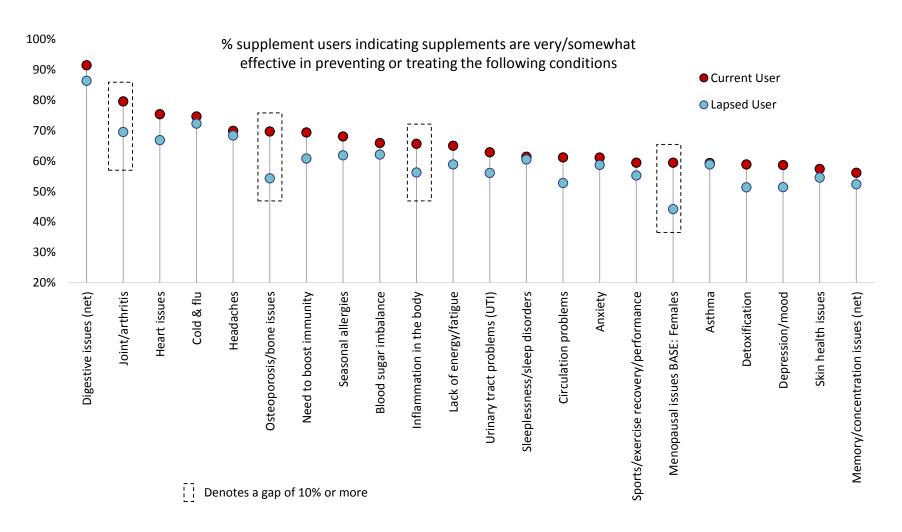
Collagen	50%
Hyaluronic acid	25%
Astaxanthin/zeaxanthin	25%
Resveratrol	21%
Vitamin E	20%
Selenium	20%
Choline	19%
Grape seed extract	18%
Acai	16%
DHEA	15%
Amino acids	15%

Read: 50% of consumers who use Collagen are using it to treat or prevent aging skin



Supplement users show high belief in the effectiveness of supplements for both management and prevention of many conditions, creating opportunities in an environment where self care is mainstreaming.

(Q.37 – % supplement users indicating supplements are very/somewhat effective in preventing or treating the following conditions)



Quadrant analysis illuminates opportunities based on levels of concern to prevent a condition, plotted against the perceived effectiveness of available supplements to remedy that condition.

(Q.37/Q.69 – % general population indicating supplements are very/somewhat effective in preventing or treating the following conditions/% general population indicating they are very concerned about preventing the conditions)



Understanding the market opportunities, based on consumer need and level of market coverage, provides insights into better product positioning.

Un-crowded market; high need

Un-crowded market; lower need

Crowded market; high need

Cancer

Heart disease

Need to lose weight

Mental focus

Stress, depression, anxiety

Vision issues

Diabetes

Inflammation in body

Osteoporosis

Sleep disorders

Loss of muscle

Aging skin/wrinkles

Skin health issues

Detoxification

Digestive issues

Joint health issue

High cholesterol

High blood pressure

Lack of energy

Headache

Need very effective product

Need to educate

Need to differentiate product

The quadrant analysis can be broken down into three areas of opportunity. In an un-crowded market (where perceived effectiveness of current products is low) and where high need and concern exists, a new entry into the market will have to be very effective to fill the void and overcome consumers' pre-existing perceptions that available condition-specific products are just not effective. In order to take advantage of an opportunity in an un-crowded market with lower concern, not only will the product have to be very effective, but concern or need will have to be boosted through education or a niche group of highly concerned consumers will have to be uncovered and targeted in order to be successful. For the third area of opportunity, a product will need to be highly differentiated, since the market is already crowded with products perceived as effective.

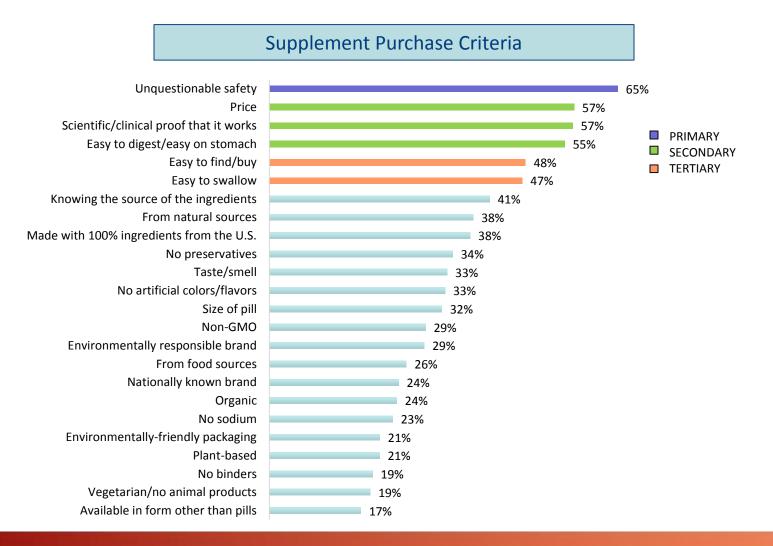




SUPPLEMENT DYNAMICS

Because of the high importance placed on safety, it needs to be a foundational aspect of any supplement messaging.

(Q.24 - % supplement users indicating the following are very important in their decision to purchase dietary supplements)





While "unquestionable safety" is the most important attribute for both light and heavy users, light supplement users are more concerned about the perceptible attributes of price, ease of use, taste and smell.

(Q.24 - % supplement users indicating the following are very important in their decision to purchase dietary supplements)

Supplement Purchase Criteria

Light User **Heavy User** Unquestionable safety Unquestionable safety Easy to digest/easy on stomach Price Scientific/clinical proof that it works Scientific/clinical proof that it works Easy to find/buy Easy to digest/easy on stomach Easy to find/buy Price Easy to swallow Knowing the source of the ingredients Knowing the source of the ingredients From natural sources From natural sources Made with 100% ingredients from the U.S. Made with 100% ingredients from the U.S. No preservatives Taste/smell Non-GMO

Denotes the item is unique to the user's list

While physicians have an overwhelming impact on supplement users' purchase decisions, other influencers also help to enhance validity and promote purchase.

(Q.25 – % supplement users indicating the following influence their decision to purchase supplements "a lot")

% supplement users indicating the following influence their decision to purchase supplements "a lot"

	Supp User	Millennials	Gen X	Boomer	Matures
Physician/Doctor	64%	58%	62%	66%	82%
Pharmacist	39%	39%	38%	40%	41%
Dietitian/Nutritionist	35%	40%	36%	30%	29%
USDA Organic Seal	30%	33%	32%	28%	21%
Spouse/Significant other	29%	33%	35%	24%	22%
Healthcare website	27%	33%	24%	25%	19%
Package labels	27%	27%	27%	28%	21%
Non-GMO certification	25%	26%	26%	25%	21%
Adult family member (not spouse)	25%	33%	27%	17%	16%
Friend	22%	29%	22%	15%	15%
Alternative Healthcare Practitioner	21%	23%	19%	20%	17%
Coupons	20%	20%	21%	19%	18%
Children in household	13%	18%	19%	8%	6%
Books	13%	17%	12%	12%	6%
Company website	13%	18%	10%	9%	10%
Product brochures	13%	14%	8%	14%	13%

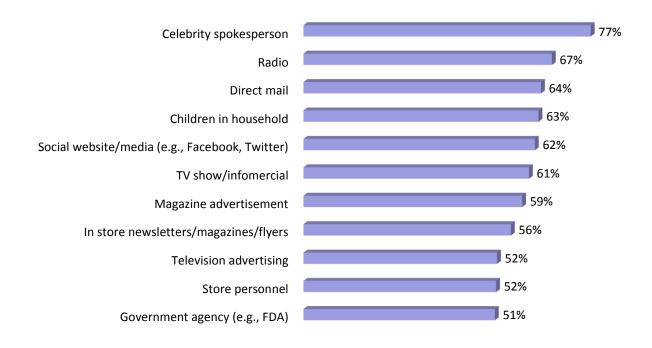


Denotes the highest percentages across generations

Conversely, there are some sources by which supplement users indicate they are "not at all" influenced and which may provide very little value.

(Q.25 – % supplement users indicating the following do not influence their decision to purchase supplements at all)

% supplement users indicating the following do not influence their decision to purchase supplements "at all"

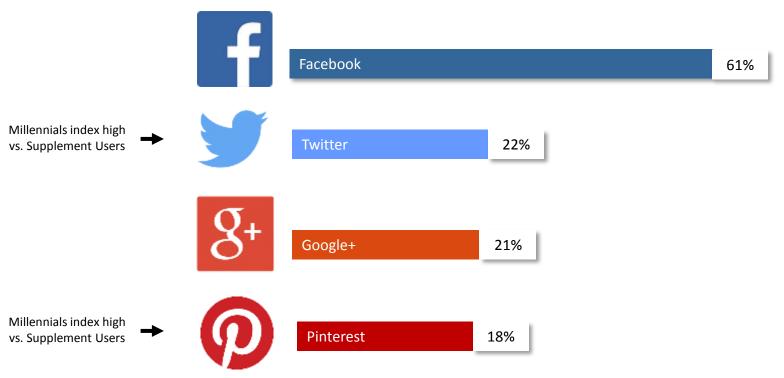




Of those supplement users who *are* influenced by social media, either a lot or a little (38%), the majority report Facebook is is most influential.

(Q.26 – % consumers influenced by social media indicating which social media/websites influence their decision to purchase supplements)

% consumers influenced by social media indicating which social media/websites influence their decision to purchase supplements





Even though consumers are highly influenced by their doctors, two out of five wish their doctors actually knew more about supplements.

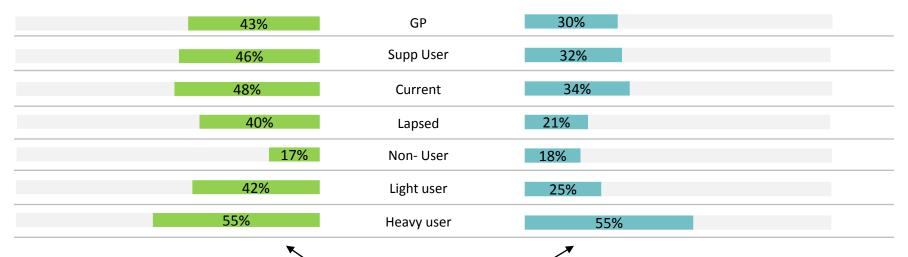
(Q.27/Q.31 –% consumers who completely/somewhat agree with the statements)



"I wish my doctor knew more about dietary supplements"



"Oftentimes, I feel I know more about alternative approaches to a healthy lifestyle such as supplementation and nutrition compared to what my doctor knows"







Although a third of supplement users feel they know more about alternative approaches to a healthy lifestyle compared to their doctor, the majority *have* discussed this topic with their doctor.

(Q.29/Q.31 – % consumers indicating they have done each of the following/% consumers who completely/somewhat agree with the statement)

About a third of supplement users (32%), feel they oftentimes know more about alternative approaches to a healthy lifestyle such as supplementation and nutrition compared to their doctor.

% consumers indicating they have done each of the following



I have discussed the dietary supplements I use with my medical doctor

Current Supp User	62%
Lapsed Supp User	34%



Significantly more Matures than all younger generations



I have asked my medical doctor about specific dietary supplements based on seeing advertisements

34%

3 170	
24%	



I have asked my pharmacist for advice about specific dietary supplements

33%





I have discussed the dietary supplements I use with an alternative practitioner (e.g., chiropractor)

23%

23/0

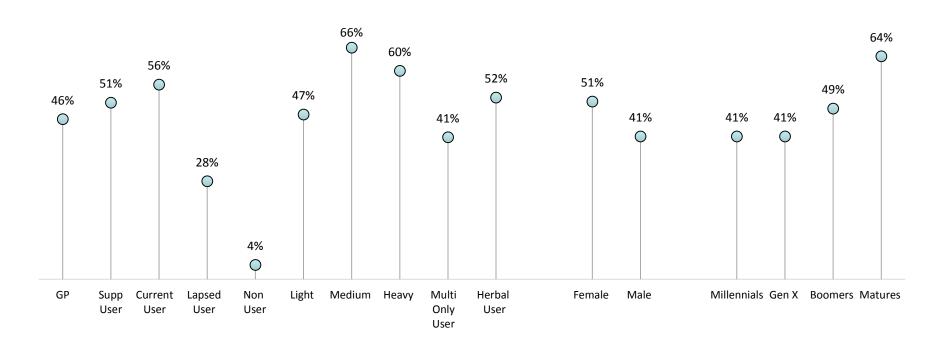
13%



In addition to consumers having discussed supplements with their doctor, half of supplement users indicate their doctor has actually recommended they use specific supplements.

(Q.30 – % consumers indicating their doctor has recommended they use specific supplements)

My doctor has recommended I use specific supplements



Influence of physicians and pharmacists is similar across Rx and OTC; however, nutritionists have higher influence over supplements.

(Q.25/Q.60/Q.63 - % general population indicating the following influence their decision "a lot" when deciding to purchase/use a category)

% general population indicating the following influence their decision "a lot" when deciding to purchase/use a category

		<u>Supplements</u>		Over-the-counter		<u>Rx</u>
	64%	Physician/Doctor	56%	Physician/Doctor	69%	Physician/Doctor
	39%	Pharmacist	36%	Pharmacist	34%	Pharmacist
ر م	35%	Dietitian/Nutritionist	26%	Dietitian/Nutritionist	21%	Dietitian/Nutritionist
	30%	USDA Organic Seal	24%	Spouse/Significant other	21%	Spouse/Significant other
	29%	Spouse/Significant other	20%	Adult family member	18%	Government agency (e.g., FDA)
	27%	Healthcare website (e.g., WebMD)	20%	Package labels	16%	Adult family member
	27%	Package labels	18%	Government agency (e.g., FDA)	16%	Alternative Healthcare Practitioner
	25%	Non-GMO certification	18%	Healthcare website (e.g., WebMD)	14%	Healthcare website (e.g., WebMD)

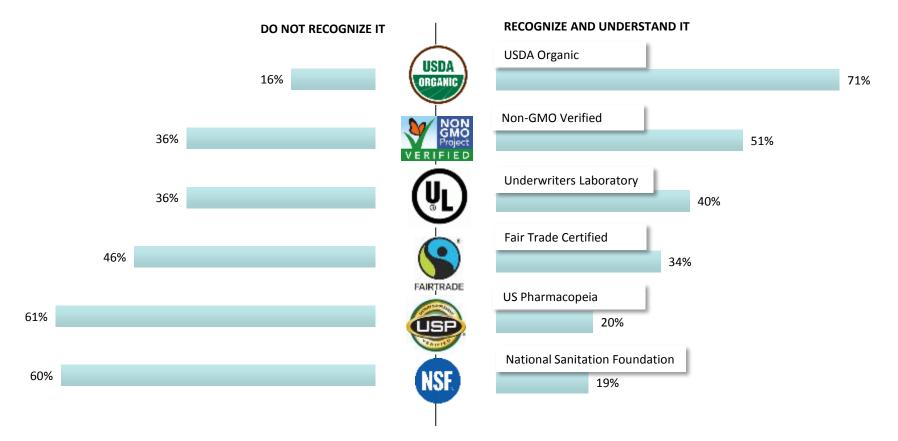
Non-GMO certification and USDA Organic Seal were not asked of Over-the-counter medications and Rx



Seals offer a level of transparency for supplement products, revealing they have met certain standards and provide additional assurance about the validity of the product.

(Q.22 – % general population indicating their level of recognition of certain seals on supplement products)

% general population indicating their level of recognition of certain seals on supplement products



Seals can have a positive impact on purchase, provided consumers understand what the seal verifies and it is meaningful to them.

(Q.23 – % supplement users indicating how certain seals on supplement products impact their purchase)



% supplement users indicating how certain seals on supplement products impact their purchase

	% supplement users more likely to purchase due to seal	Number (in millions) of supplement users
USDA Certified Organic	44%	79.6 MM
Non-GMO Verified	37%	66.0 MM
Underwriters Laboratory	22%	39.7 MM
Fair Trade	21%	37.3 MM
United States Pharmacopeia	14%	25.1 MM
National Sanitation Foundation	13%	23.7 MM

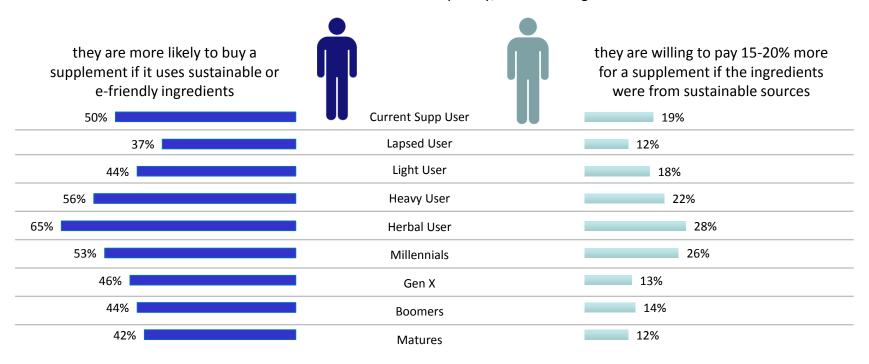


THE COMPOSITION OF SUPPLEMENTS

Sustainability is moving into the mainstream mindset as consumers are increasingly expectant that companies be mindful of the environment.

(Q.27/Q.28 – % consumers who completely/somewhat agree with the statement/% consumers indicating how much more they would be willing to pay for supplements if they had certain characteristics)

% consumers who completely/ somewhat agree





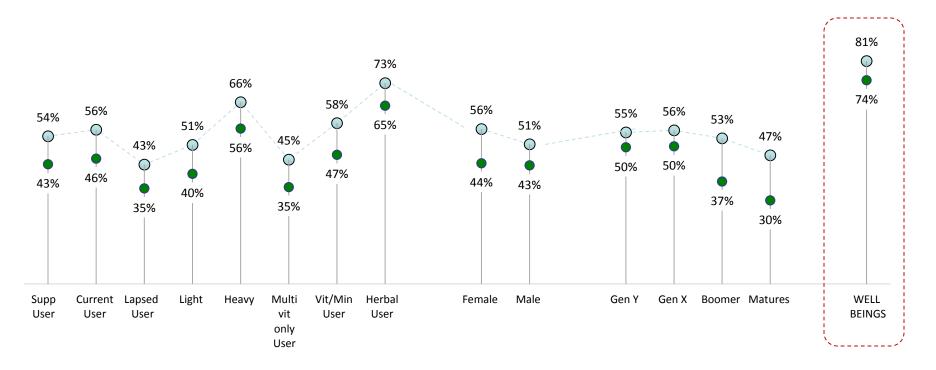
Even further, the majority of supplement users prefer to purchase supplements derived from natural sources with organic not far behind.

(Q.34– % supplement users who completely/somewhat agree with the statement)

Heavy use of supplements and use of herbals promotes much stronger desire for natural *and* organic sourcing. It is often the case, that herbal users are heavier users of supplements. Therefore, natural and organic ingredients are highly preferable to herbal users as they are perceived as closer to nature with less chemicals and adulteration.

% supplement users who completely/somewhat agree...

- they prefer to buy dietary supplements that are derived from natural sources
- they prefer to buy dietary supplements that are derived from organic sources





Supplement users are willing to pay a premium for their supplement ingredients to be all natural, 100% organic, and sourced from the U.S.

(Q.28 – % current supplement users indicating how much more they would be willing to pay for supplements if they had certain characteristics)



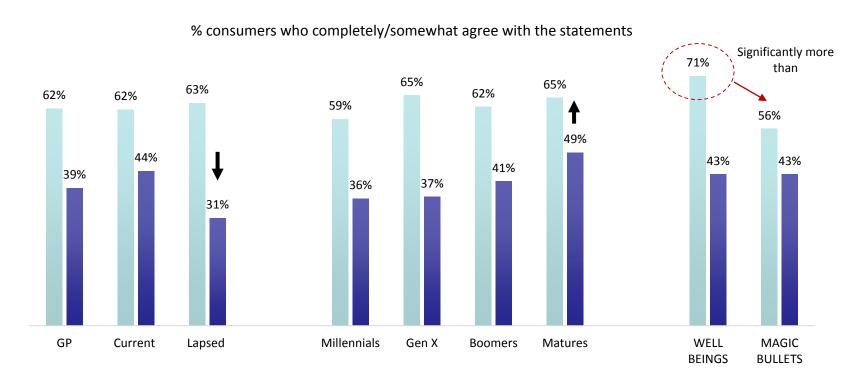
How much more are users willing to pay for certain characteristics?

● 15-20% more ◆ 5-10% more ■ No more

The ingredients were all-natural	26%	● ■ 31% ◆ 43%		
The ingredients were sourced from the United States	24% ● 34%■ ♦ 42%		sourced from the United States 24% 34% \$\infty\$	
The ingredients were 100% organic	26%	● 37% 🖈 38%		
The ingredients were from sustainable sources	19% •	40% 41%		
The ingredients were fair trade certified	17% •	♦ 37% ■ 46%		
They were certified by a governmental authority	19% •			
The ingredients were plant-based (no animal products)	19% •	♦ 34% ■ 47%		
The outside capsule (not the ingredients inside) was vegetarian	12%	♦ 27%	61%	

Supplementation is seen as a necessity for many consumers as they realize their diet usually cannot provide all the nutrition they need; innovative forms may be one solution to "pill adverse" consumers.

(Q.27- % consumers who completely/somewhat agree with the statements)

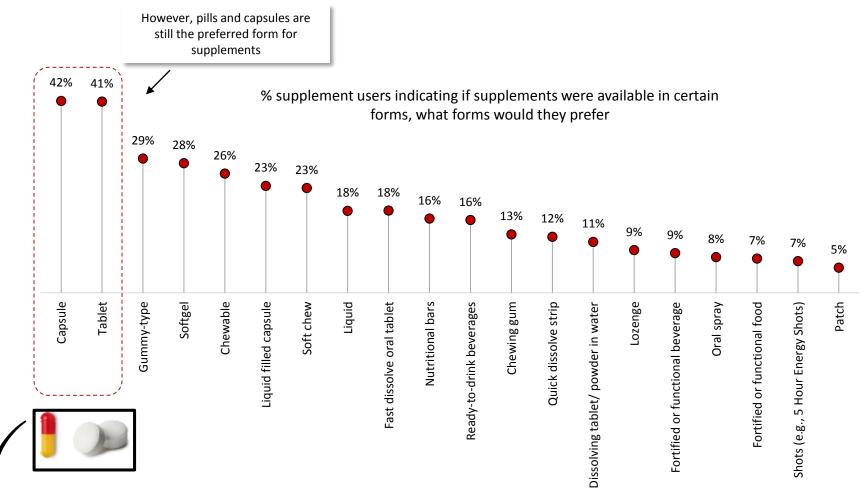


- I would prefer to get all my daily nutritional requirements in the foods I eat, rather than have to take additional supplements
- I prefer my dietary supplements to be in pill form rather than formulated into the foods I eat



Almost a third of supplement users (31%) would prefer to get their supplements in forms other than pills and capsules.

(Q.27/Q.39 – % supplement users who completely/somewhat agree with the statements/% supplement users indicating if supplements were available in certain forms, what forms would they prefer)



Understanding which forms are preferred by generation may help in developing a more demographically-targeted supplement product.

(Q.39 - % supplement users indicating if supplements were available in certain forms, what forms would they prefer)

% supplement users indicating if supplements were available in certain forms, what forms they would prefer

Millennials	5

Gummy-type

Tablet

Capsule

Chewable

Soft chew

Softgel

Nutritional bars

Liquid

Liquid filled capsule

Chewing gum



Gen X

Tablet

Capsule

Gummy-type

Chewable

Soft chew

Softgel

Liquid filled capsule

Nutritional bars

Fast dissolve oral tablet

Liquid



Boomers

Capsule Tablet

Softgel

Liquid filled capsule

Chewable

Fast dissolve oral tablet

Gummy-type

Soft chew

Liquid

Ready-to-drink beverages



Matures

Capsule

Tablet

Softgel

Liquid filled capsule

Fast dissolve oral tablet

Chewable

Gummy-type

Ready-to-drink beverages

Soft chew

Nutritional bars

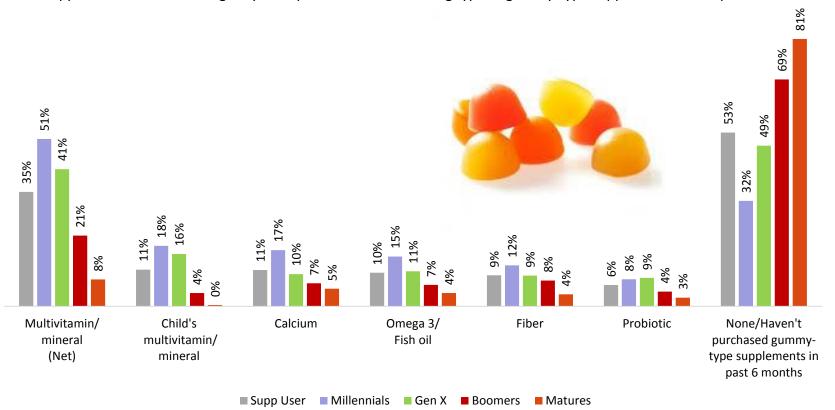


Highlights where capsules and tables show up on each list
Yellow highlight the forms which are unique to Boomers and Matures
Denotes a unique item to Millennials

Gummies are appealing to a wider audience of consumers as they expand across a variety of supplement products.

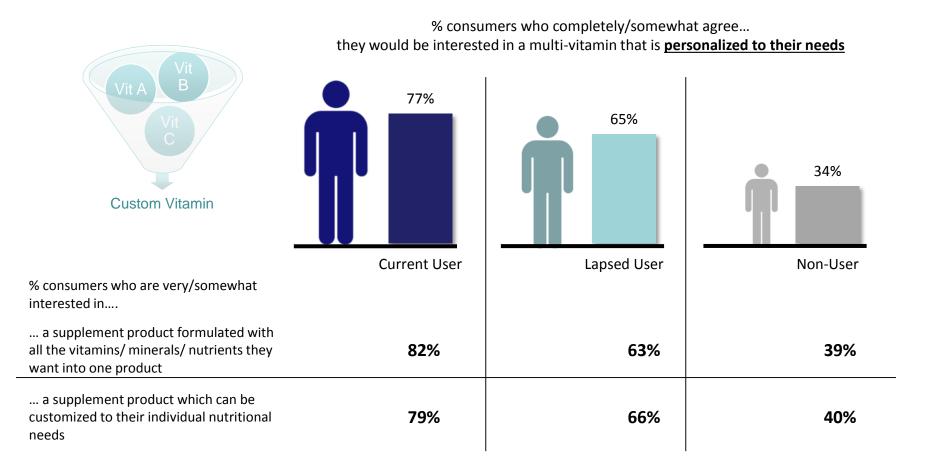
(Q.40 - % supplement users indicating they have purchased the following type of gummy-type supplements in the past 6 months)

% supplement users indicating they have purchased the following type of gummy-type supplements in the past 6 months



Customized supplements are highly desired and may even attract a portion of Lapsed users and non-users.

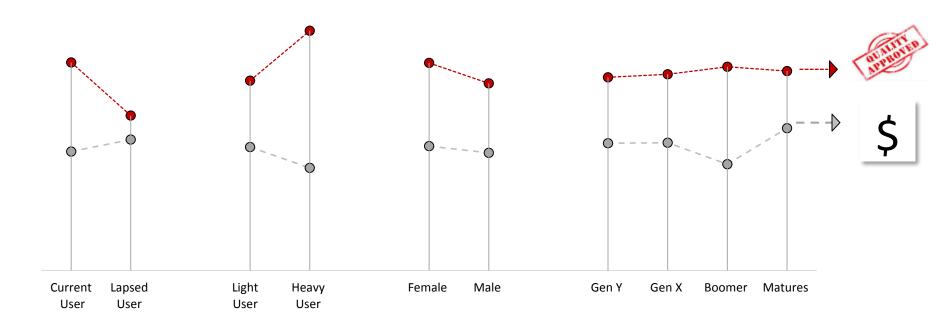
(Q.27/Q.47 - % consumers who completely/somewhat agree with the following statements/% consumers indicating they are very/somewhat interested in the following customized products)



Brand differentiation *does* matter, as supplement consumers are savvy to the fact that not all supplements are the same.

(Q.34– % consumers who completely/somewhat agree with the statements)

% consumers who completely/somewhat agree with the statements



- --- -- Not all brands of supplements are the same; I base my purchase decision on product quality
- ─ Most brands of supplements are the same; I base my purchase decision mostly on price



However, brand loyalty exhibits some instability as only about half of supplement users regularly buy the same brand.

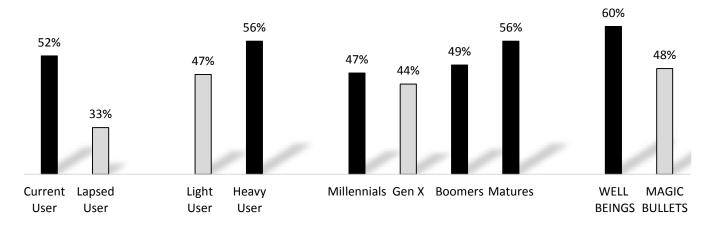
(Q.34– % supplement users who completely/somewhat agree with the statements)

Opportunities exist for brands to build stronger loyalty. It is important to understand what your brand equity is in order to build a better foundation for engaging a broader range of consumers.

% supplement users who completely/somewhat agree that...

They are loyal to the supplement brands they use and regularly buy the same brand





Some concern centers around supplement nutrient level content; in effect, does a supplement contain what it professes to contain?

(Q.34– % consumers who completely/somewhat agree with the statement)

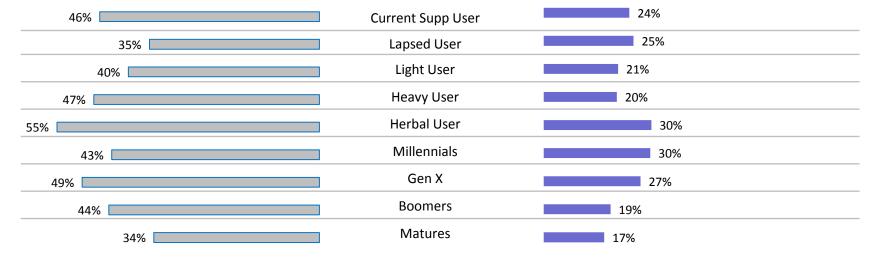


They are concerned that the supplements they use may contain a <u>lower level</u> of nutrients than what is listed on the label

% consumers who completely/somewhat agree...



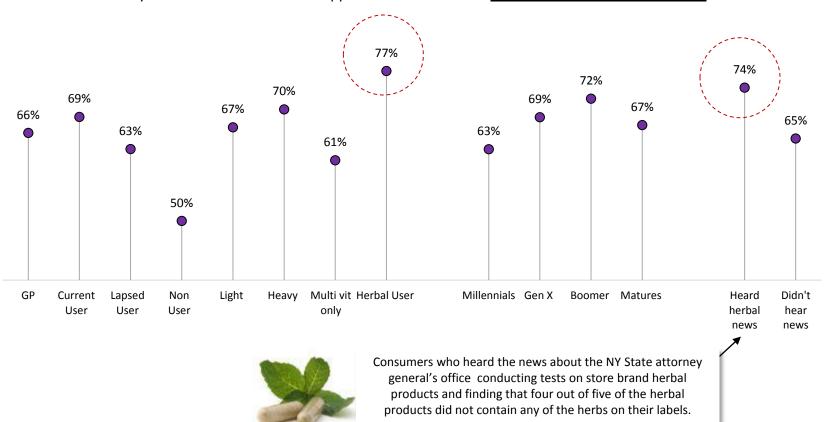
They are concerned that the supplements they use may contain a <u>higher level</u> of nutrients than what is listed on the label



Concern that supplements make false claims about ingredient content is rather high, perhaps fueled by the NY State AG office allegations.

(Q.27– % supplement users who completely/somewhat agree with the statement)

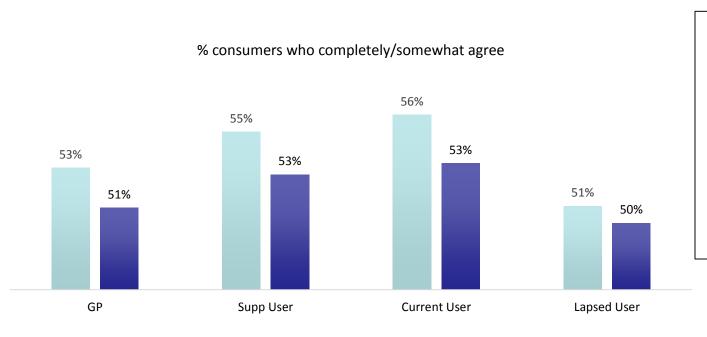
% supplement users who completely/somewhat agree that... they are concerned that some supplements are based on <u>false claims of ingredient content</u>



Forty-three percent of supplement users prefer to buy store brand supplements because they have a lower price and feel they are essentially the same as well known national brands.

(Q.52-% consumers who completely/somewhat agree with the statement)

However, consumers are still somewhat skeptical of store brand supplements with about half unsure about their safety or effectiveness when compared to well-known national brands.





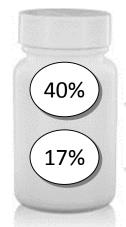
The NY State attorney general's office had tests conducted on top-selling store brands of herbal supplements at four national retailers — GNC, Target, Walgreens and Walmart — and stated that four out of five of the products did not contain any of the herbs on their labels. While test methods were highly questioned, a negative market was expected.

- Store brands of dietary supplements are just as SAFE as well-known national brands
- Store brands of dietary supplements are just as EFFECTIVE as well-known national brands



Even further, concern over the quality of store brands persists; one out of five indicate they just do not trust store brand supplements.

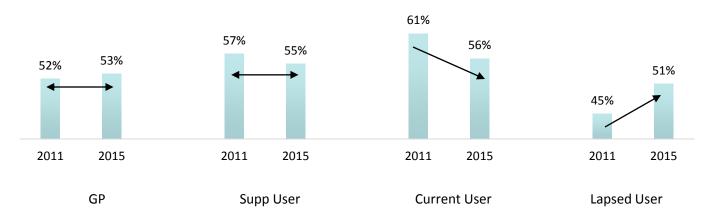
(Q.52– % consumers who completely/somewhat agree with the statement)



of supplement users feel national brands have to meet higher standards of quality

of supplement users indicate they do not trust store brand supplements

% consumers indicating store brands of dietary supplements are just as SAFE as well-known national brands

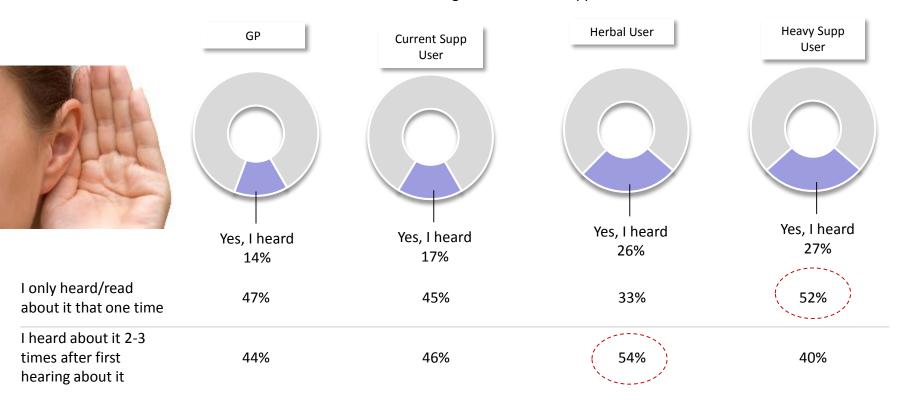


The New York State AG may have fueled skepticism about store brand supplements after his actions started a controversial firestorm.

(Q.53/Q.54– % consumers indicating they had heard about the New York State Attorney General conducting testing on store brand supplements/% consumers, who heard the news, indicating how many times they heard about it after the initial time)

The NY State attorney general's office had tests conducted on top-selling store brands of herbal supplements at four national retailers — GNC, Target, Walgreens and Walmart — and found that four out of five of the products did not contain any of the herbs on their labels.

% consumers indicating they had heard about the New York State Attorney General conducting testing on store brand supplements



After hearing about the testing on store brand herbal supplements, a portion of consumers changed their purchase behavior.

(Q.55-% consumers, who heard the news, indicating how the news affected their purchase of herbal supplements)

% consumers, who heard the news, indicating how the news affected their purchase of herbal supplements

<u>% GP</u>	% Current Users	% Heavy Users	% Herbal Users
It has not affected my purchase of any brand of herbal supplement 38%	43%	52%	47%
I have <u>switched</u> to a well-known national brand	19%	18%	23%
I have stopped buying store brand herbal supplements from Target, Walgreens, Walmart or GNC	20%	29%	25%
I have <u>stopped buying all</u> herbal supplements	3%	0%	2%

Denotes high index vs. GP



Even after consumers heard that the test may have been invalid, a third still stopped buying store brand supplements from those retailers in question, evidence of the impact of negative news.

(Q.56/Q.55– % consumers who heard the news about the New York State Attorney General conducting testing on store brand supplements indicating whether they heard it was an invalid test/% consumers indicating how the news affected their purchase of herbal supplements)

Have you heard the testing was an invalid type of testing procedure for these type of products?



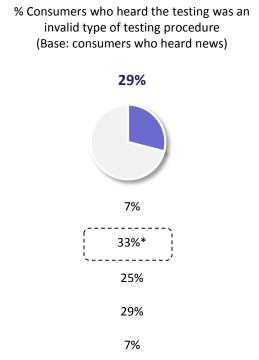
Stopped buying all herbal supplements

Stopped buying store brand herbal supplements from Target, Walgreens, Walmart or GNC

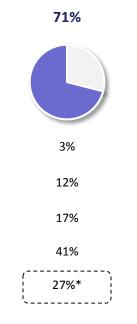
I've switched to a well-known national brand

It has not affected my purchase of any brand of herbal supplement

I do not use herbal supplements



% of consumers who <u>did not hear</u> testing was invalid (Base: consumers who heard news)



^{*} Denotes significantly higher than corresponding group





BARRIERS TO SUPPLEMENT USE AND LAPSED USAGE

Lapsed supplement users are more likely to be male, less educated, non-Caucasian, and a member of EAT, DRINK & BE MERRYS segment.

(Demographic measures among Current Supplement Users and Lapsed Users)



	Current Supp User	Lapsed User
Male	45%	52%
Female	55%	48%
Average age	48 yrs. old	46 yrs. old
College grad+	34%	20%
Median income	\$62.2K	\$44.9K
White	80%	70%
Black/AA	10%	21%
Hispanic	14%	17%
Use OTC	66%	51%
Use Rx	61%	48%
Child take a providinita main /pain and	F.C0/	220/
Child takes a multivitamin/mineral	56%	32%
Spouse/significant other uses supplements	36%	17%
WELL BEINGS member	27%	15%
EAT, DRINK & BE MERRYS member	1%	42%

Green shading denotes significantly higher than corresponding group



Lapsed users exhibit a higher lack of understanding supplements and are less inclined to believe they can manage their health through nutrition and supplementation.

(Q.27/Q.31/Q.34 - % Lapsed users who completely/somewhat agree with the following statements)

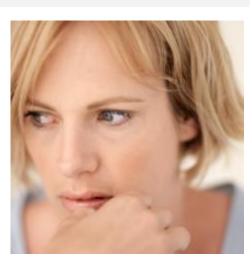
These findings are very telling as to why the Lapsed supplement user is no longer compliant or has just given up using supplements all together. Getting this past user back on track may require a little effort. First, remove barriers to supplement use in order to create positive shifts in attitudes toward supplements. Second, gather a fuller understanding of the target and determine the messages that will resonate with them. Third, provide a clear path of small steps which can direct them toward healthier goals.

Lapsers are significantly more likely to indicate:

- ✓ They don't know enough about dietary supplements to know what they should be using
- ✓ They only use dietary supplements when they are sick or feel themselves getting sick
- ✓ They do not know how to tell which brands of dietary supplements are high quality

They are significantly less likely to indicate:

- ✓ They believe they can manage many of their health issues through good nutrition
- ✓ They are always searching for alternative ways to improve/maintain their health
- ✓ They believe they can manage many of their health issues by taking vitamins, minerals and other supplements



Consumers who do <u>not</u> use supplements at all are significantly more likely to feel they just don't need them; whereas, Lapsed Users appear to have more "movable" barriers.

(Q.15. - % Lapser Users and Non-users indicating why they do not currently use supplements)

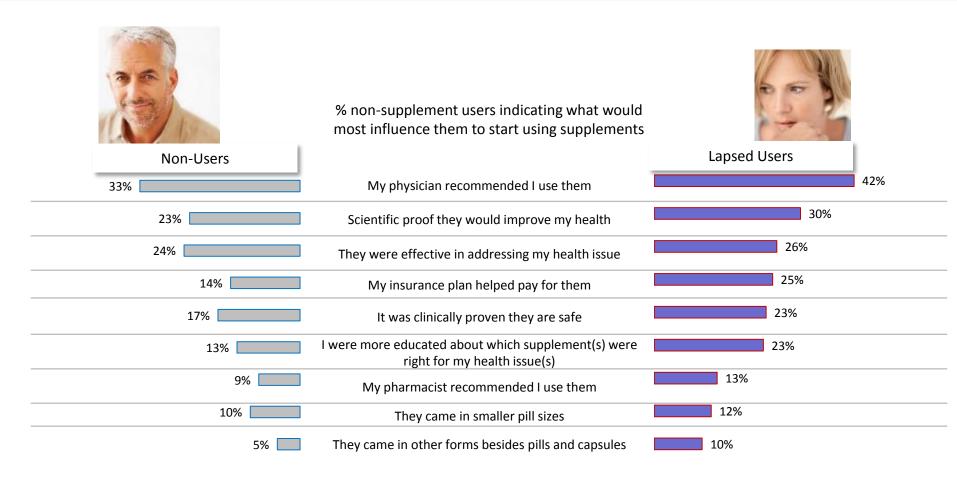
% Lapser Users and Non-users indicating why they do not currently use supplements

Reasons which are more relevant to Lapsed Users compared to Non-Users **21%** 33% They cost too much I am not sure what supplements I should be taking **15%** 24% They are not proven to be effective 12% **16% 4%** 12% My insurance does not pay for them **5**% 11% I only use them when I need them (not in past 30 days) I am concerned they might interact with the prescription **♦** 3% 10% medications I take Reasons which are more relevant to Non-Users compared to Lapsed Users 9 19% **35%** I just don't need them 15% 18% I get all the nutrients I need in the foods I eat 15% 19% I don't have any health issues Lapsed Users Non-Users

Again, Non-Users show much lower inclination to start using supplements for any reason compared to Lapsed users.

(Q.16. - % non-supplement users indicating what would most influence them to start using supplements)

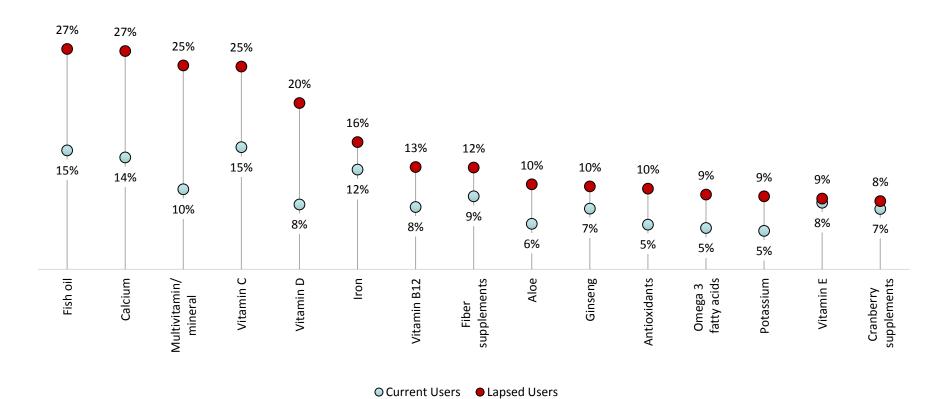
In fact, a third of Non-Users (35%) indicate they would not use supplements for any reason compared to only 14% of Lapsed Users.



What is concerning is that Lapsed usage is high for some of the more essential supplements such as fish oil, calcium, multis, and Vitamin C.

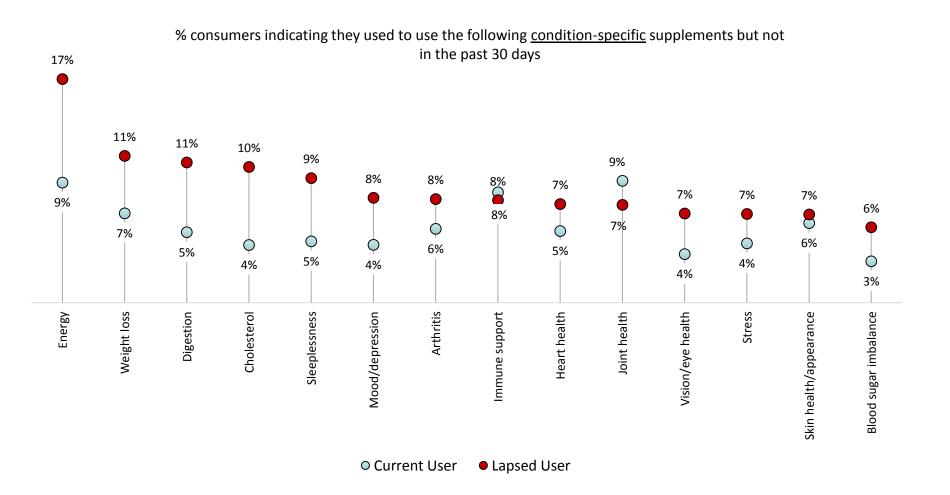
(Q.19 - % consumers indicating they used to use the following supplements but not in the past 30 days)

% consumers indicating they used to use the following supplements but not in the past 30 days



Are Lapsed Users just not experiencing the desired benefits with condition-specific supplements?

(Q.20 - % consumers indicating they used to use the following supplements but not in the past 30 days)



Determining why consumers choose to no longer use a supplement is one of the first steps in determining how to boost reengagement.

(Q.21 - % consumers indicating why they no longer use specific supplements – by reasons)

% consumers indicating why they no longer use specific supplements – by reasons

47%

44%

40%

Too expensive		Not effective
Peptides	60%	Glucosamine/chondroitin
Resveratrol	52%	Saw Palmetto
CoEnzyme Q10 (Co-Q10)	47%	St. John's Wort

I only use it when I ne	ed it
Cranberry supplements	43%
Milk Thistle	41%
Echinacea	39%
lodine	37%

Wanted to reduce # of pills I'm taking				
Lutein	37%			
Vitamin B1 (thiamine)	30%			
Curcumin/Turmeric	28%			

No longer managing the condition I was taking it for				
Iron	35%			
ЕНА	33%			
Astaxanthin/zeaxanthin	24%			
Folic acid, folate, B9	23%			

Had a negative reaction				
EHA	33%			
Niacin	26%			
Astaxanthin/zeaxanthin	24%			
Plant sterols/stanols	24%			

I got tired of taking	it
Flaxseed	30%
Omega 3 fatty acids	27%
Multivitamin/mineral	25%
Antioxidants	24%
Choline	24%

Choline	23%
Resveratrol	14%

Read as: 60% of consumers who used peptides but no longer do indicate they stopped using them because they were too expensive



The primary reasons for lapsed usage across the supplements with the highest lapsed usage is expense and getting tired of the routine.

(Q.21 - % consumers indicating why they no longer use specific supplements)

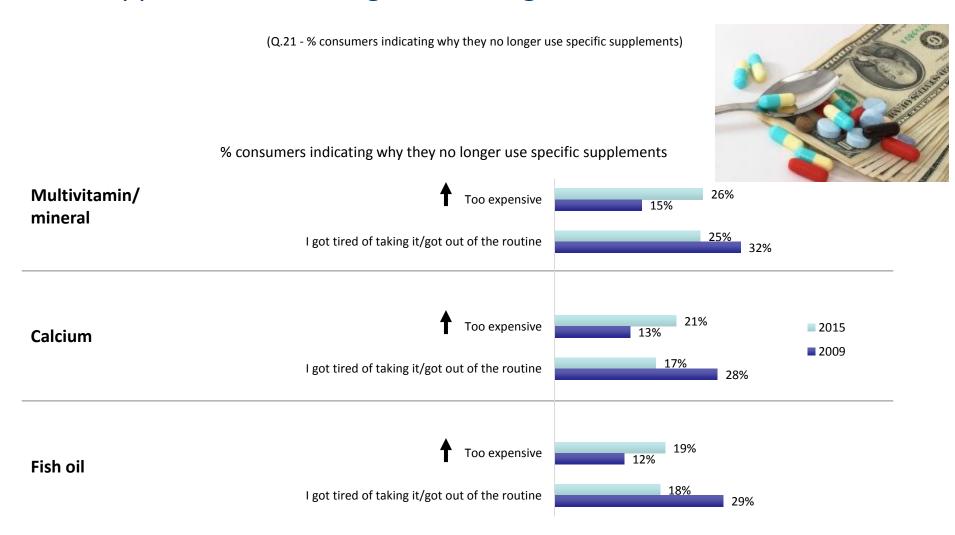
While expense may not necessarily be a barrier with a simple solution since money issues vary across different consumer groups, "getting out of the routine" is not nearly as difficult a barrier to overcome. With a little ingenuity, creativity and targeted messaging, supplement marketers can help consumers stick with a supplement regimen; perhaps using phone apps or even text messages about the health benefits of the supplement.

% consumers indicating why they no longer use specific supplements

<u>CALCIUM</u>	<u>FISH OIL</u>	MULTI VITAMIN/MINERAL
Too expensive	Too expensive	Too expensive
I got tired of taking it/got out of the routine	I got tired of taking it/got out of the routine	I got tired of taking it/got out of the routine
I wanted to reduce the # of pills I was taking	I only use it when I need it	I wanted to reduce the # of pills I was taking
I only use it when I need it	Didn't experience desired results	Didn't experience desired results
No longer trying to manage the health issue that I was taking this product for	Too difficult to swallow	I only use it when I need it
Too difficult to swallow	o difficult to swallow I wanted to reduce the # of pills I was taking	
Was advised to stop use	Found another product that was more effective	Too difficult to swallow
Didn't experience desired results	Concerned about safety of the product	Heard that products were tested and found not to contain what was on the label
	ary reasons given for no longer using supplement son which is unique to the supplement's top 8 list	



Expense has become far more of an issue since 2009 for the top lapsed supplements, creating an even higher barrier to overcome.





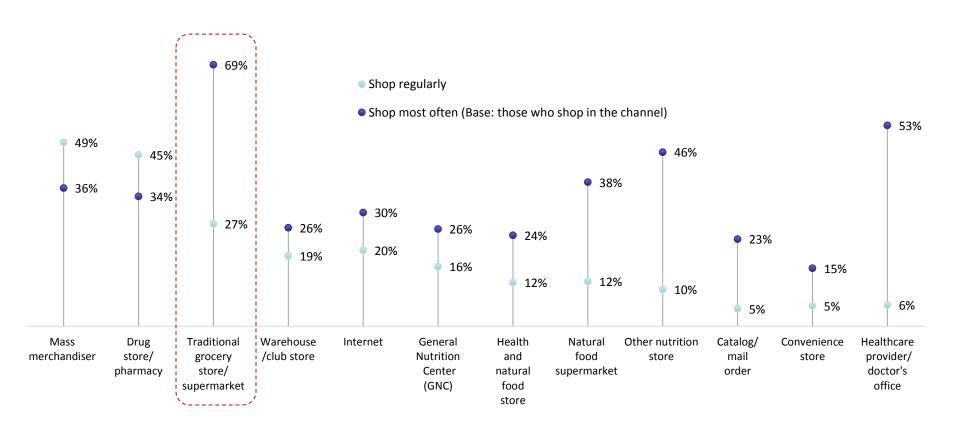


NMI SUPPLEMENT PURCHASING DYNAMICS

Most consumers shop for supplements in Mass and Drug; those who shop in grocery are most likely to buy supplements there most often.

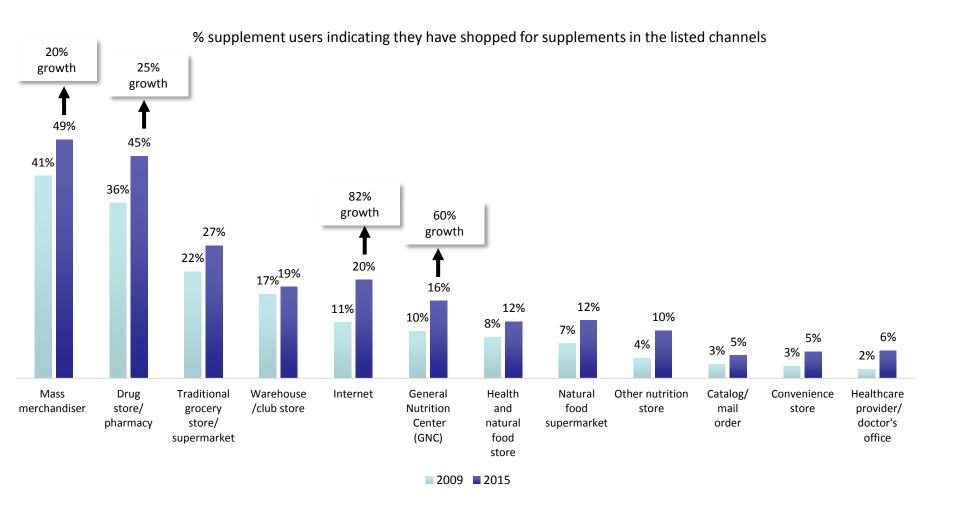
(Q.48/Q.49 - % supplement users indicating they have shopped for supplements in the listed channels/% supplements users who shop the specific channel indicating they shop it most often)

% supplement users indicating where they shop and where they shop most often for supplements

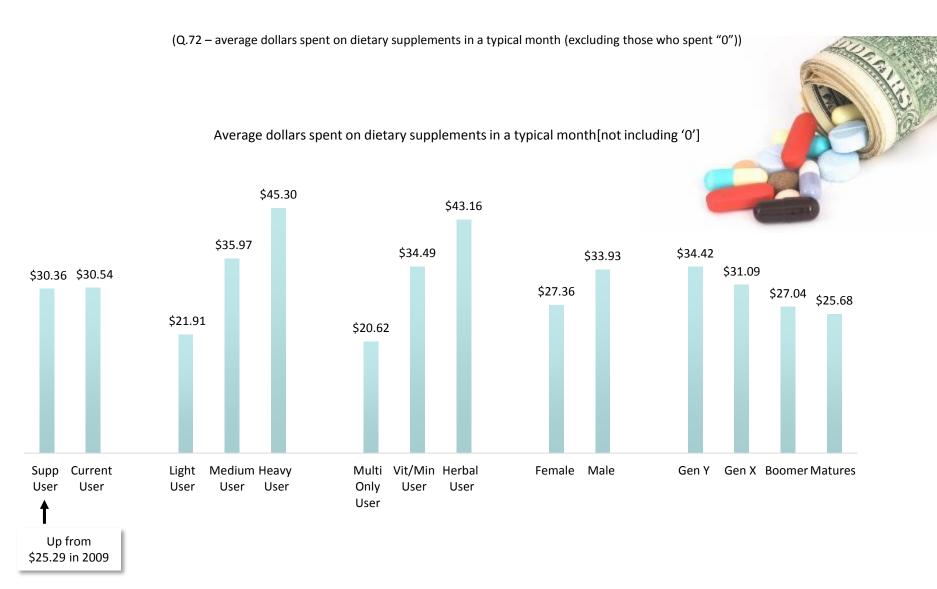


Internet shopping has grown by over 80% in the past 7 years, the highest growth across the <u>major</u> channels for supplement purchase.

(Q.48 – % supplement users indicating they have shopped for supplements in the listed channels)



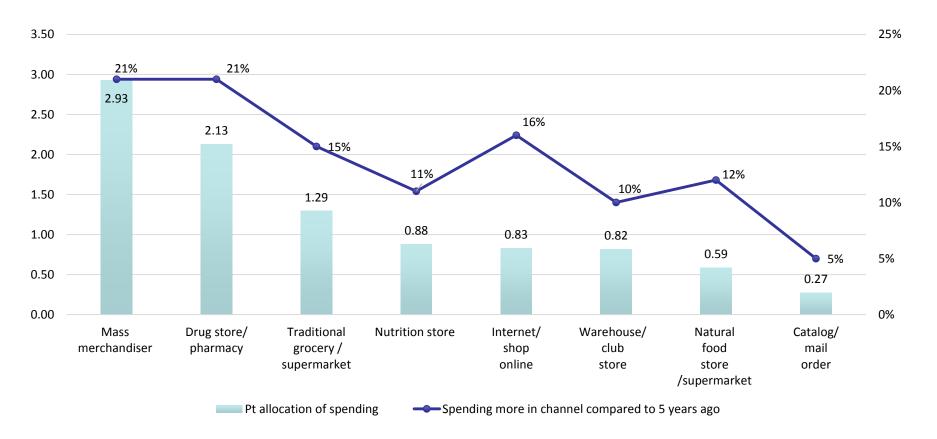
Total monthly spend on supplements is up from \$25 to \$30 as reported by supplement users.



Supplement Users are spending the largest portion of their supplement dollars in mass merchandisers.

(Q.50/Q.51 – points allocated to channels based on how much supplement users typically spend on supplements in those channels, based on an allocation of 10 total points/ % consumers indicating they have spent more in each channel compared to 5 years ago)

Consumers are not only spending the most on supplements in mass merchandisers such as Walmart or Target, but almost 1 in 5 indicate they are spending more in that channel compared to 5 years ago. Interestingly, consumers allocate about one-tenth of their spending on internet supplement purchases (0.83) but show higher increased spending on the internet compared to almost all other channels with the exception of mass and drug.



Compared to all other generations, Millennials report spending more on nutritional supplements across all channels compared to 5 years ago.

(Q.51 – % supplement users indicating they have spent more in each channel compared to 5 years ago)



% supplement users indicating they have spent more in each channel compared to 5 years ago

	Total Supplement Users	Millennials	Gen X	Boomers	Matures
Mass merchandiser	21%	130	84	82	82
Drug store/pharmacy	21%	120	93	86	89
Internet/shop online	16%	127	92	82	79
Traditional grocery store/supermarket	15%	129	89	82	75
Natural food store/supermarket	12%	168	64	64	38
Nutrition store (e.g., GNC, Vitamin World)	11%	163	80	58	51
Warehouse/club store (e.g., Sam's, Costco)	10%	120	99	88	71
Catalog/mail order	5%	157	64	82	14

Denotes high index vs. Total Supplement Users (≥ 120)

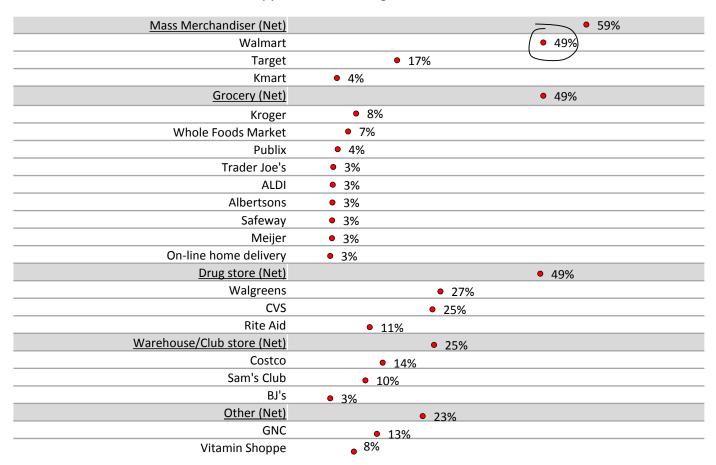


Denotes low index vs. Total Supplement Users (≤ 80)

Shopping in Walmart is driving the overall high shopping in mass merchandisers.

(Q.57 - % supplement users indicating where they shop for vitamins, mineral, herbals and other supplements on a regular and consistent basis)

% supplement users indicating where they shop for vitamins, mineral, herbals and other supplements on a regular and consistent basis







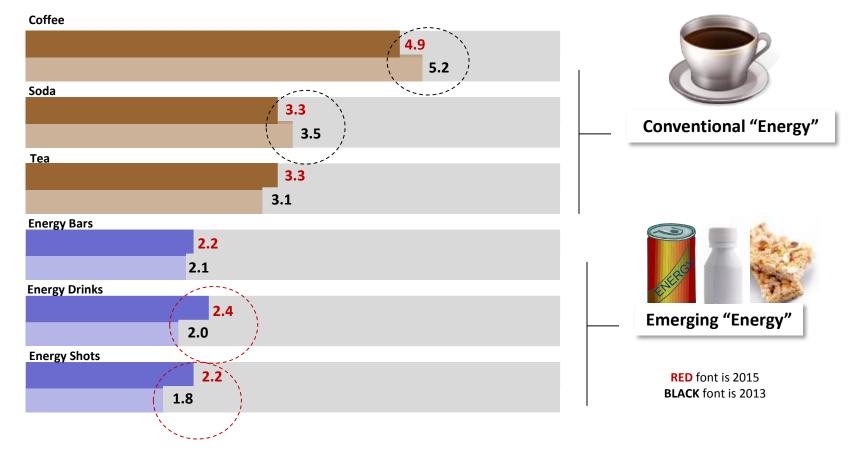
CAFFEINE INSIGHTS

Energy via caffeine is still a growing platform with opportunities popping up in non-traditional energy products such as meat snacks and even peanut butter with caffeine.

(Q.73 - average number of days per week each is consumed)

It appears that consumption of the more conventional energy products, coffee and soda, is diminishing a small degree while consumption of both energy drinks and shots are showing some increases.

Average # days per week each product is consumed by those who consume the product



Millennials show higher adoption of emerging energy forms; preference for alternative forms for this early-adopting generation is strong, revealing opportunities across an array of fortified categories.

(Q.73 - % consumers indicating they use each caffeine product)

% consumers indicating they use each caffeine product

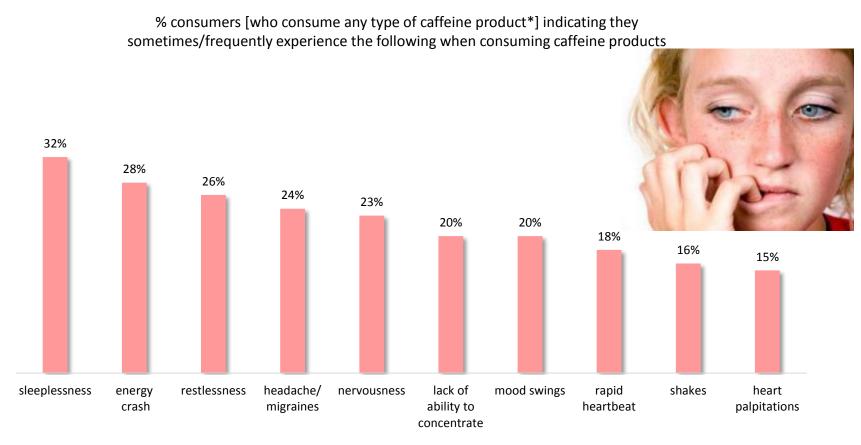
	GP	Millennials	Gen X	Boomers	Matures
Coffee	70%	66%	68%	74%	77%
Tea	65%	65%	66%	66%	64%
Soda	71%	77%	75%	67%	54%
Energy bars	27%	35%	27%	20%	16%
Energy drinks	22%	37%	26%	8%	4%
Energy shots	14%	25%	15%	6%	2%

Denotes highest percentage across generations



Many consumers readily admit to the various negative side effects of caffeine products and Millennials index high across all.

(Q.74 - % consumers [who consume any type of caffeine product] indicating they sometimes/frequently experience the following when consuming caffeine products

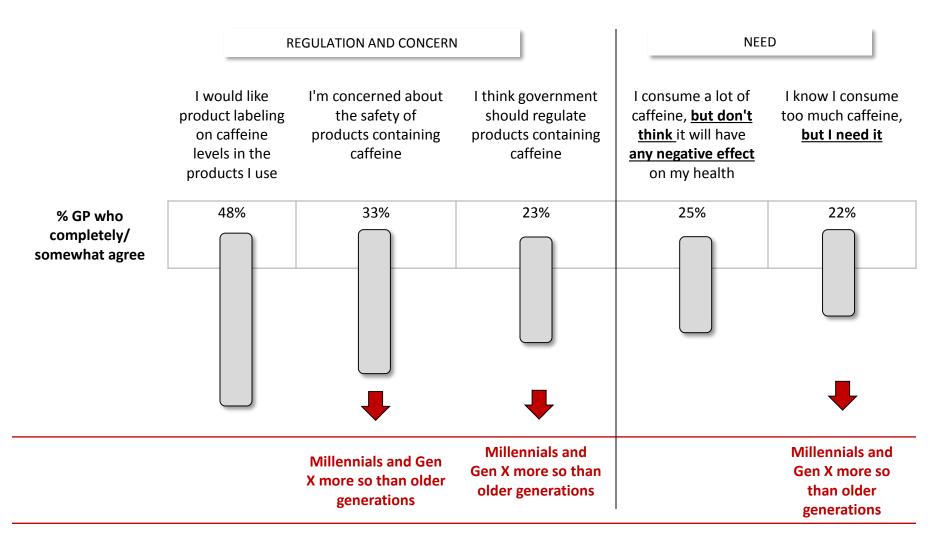


^{*} Caffeine products include: Coffee, tea, soda, energy bars, energy drinks, energy shots, over the counter pain relievers (with caffeine), weight control pills, and chewing gum (Wrigley's Alert Energy Gum)



It appears consumers are split on the safety and necessity of caffeine; but it does seem clear that consumers would at least like the level of caffeine listed on the label of caffeine products.

(Q.75 - % general population who completely/somewhat agree with the following statements)





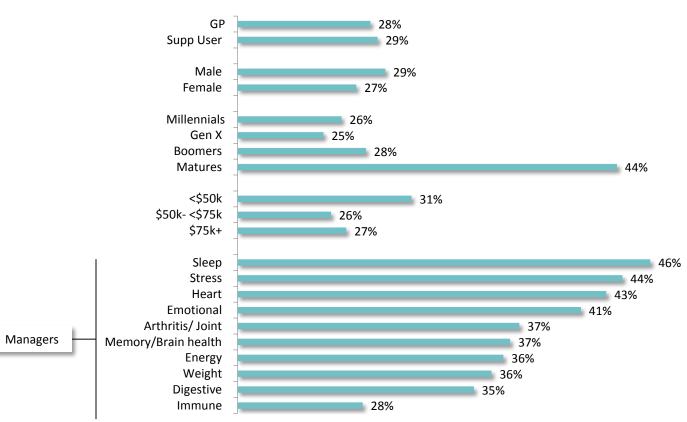


NMI OTC AND PRESCRIPTION MEDICATION

One out of four consumers feel prescription medications are a primary way they can maintain their health.

(Q.64 – % general population who completely/somewhat agree with the statement)

% consumers indicating that...
"Prescription drugs are the primary way I stay healthy"

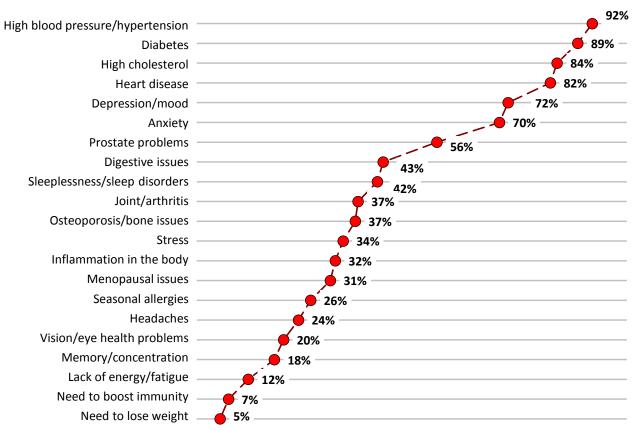




Varying levels of prescription medication usage may indicate opportunities for adjunct nutritional therapy.

(Q.71 - % condition managers indicating they use Rx to manage their condition)

% condition managers indicating they use Rx to manage their condition

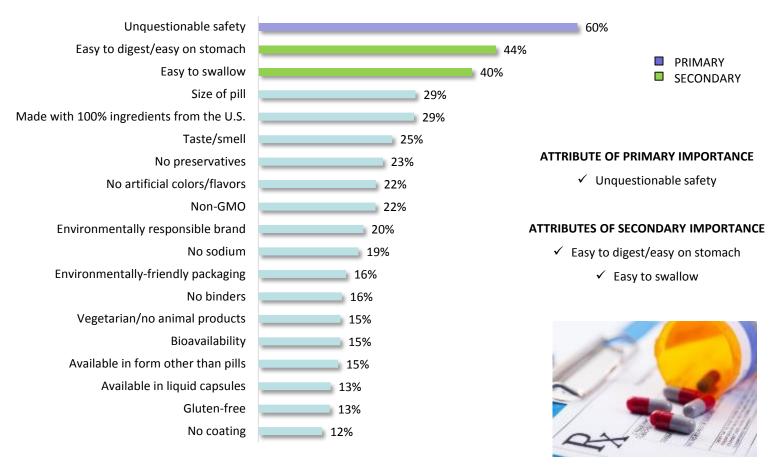




Among the attributes measured, "unquestionable safety" is at the forefront of consumers' minds when using prescription medications, followed by ease of use.

(Q.62 - % general population indicating the following are very important in their decision to purchase/use Rx medications)

% general population indicating the following are very important in their decision to purchase/use Rx medications



Concern over the side effects of prescription medications is high; conversely, the Mature generation views Rx medication as life sustaining and health promoting.

(Q.66 - % consumers who completely/somewhat agree with the following statements)

Prescription medication has gained somewhat of a negative reputation among the population due to its myriad of side effects and oftentimes, its high price tag. However, in many instances, prescription medications can be life sustaining and even life saving for some. For those consumers, prescription medication becomes a necessary part of staying healthy.

% consumers who completely/somewhat agree with the following statements **CONCERN VITAL TO HEALTH** I am concerned about Prescription drugs Prescription drugs Prescription drugs are are vital to the negative side are a necessary vital to **treating** my effects of prescription part of staying **preventing** health health issues medications healthy issues 68% GP 51% 45% 44% 64% Millennials 41% 36% 36% 70% Gen X 45% 39% 40% 70% **Boomers** 59% 51% 48% 71% Matures 75% 67% 65% Significantly more than all other generations

Even though concern about Rx medication is high, Millennials are significantly more likely to visit their doctor in order to obtain a prescription than older generations.

(Q.64 – % general population who completely/somewhat agree with the statement/% general population indicating they have done the following)

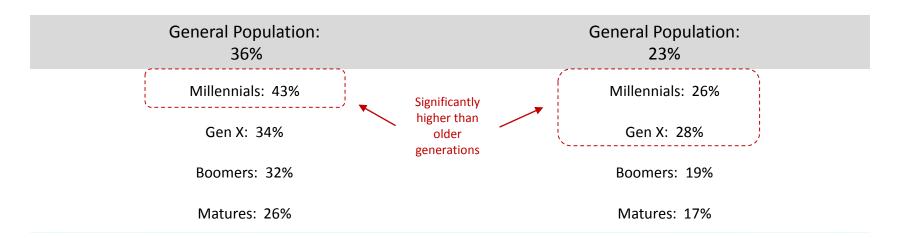
% general population who completely/somewhat agree with the statement



"I go to my doctor primarily to get a prescription for medication"



"I can't afford to use all the prescription medications my doctor has prescribed"



Spending on prescription medications has declined over the past three years – concern about side effects and cost may be driving decline.

(Q.72 - average dollars spent on prescription medications in a typical month; excluding those who spent "0")

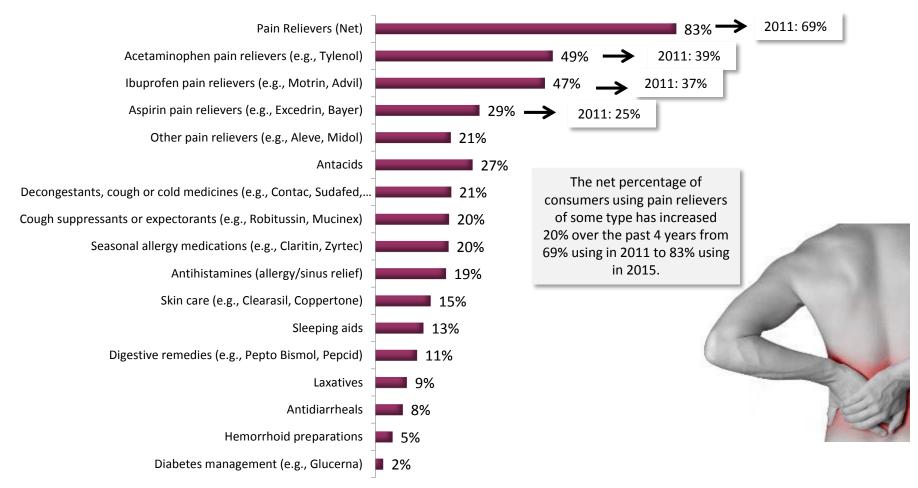
Average dollars spent on prescription medications in a month [not including '0']



Over-the-counter pain relief continues to be a strong opportunity driven by an aging population, highly stressed Millennials and Gen Xers, and a portion of physically active consumers.

(Q.58 – % general population indicating which of the following types of over the counter products they use)

% general population indicating they use the following OTC products



Spending on OTC medication appears stable, possibly due to consumer engagement in self care and cost conscious behavior such as avoiding going to the doctor.

(Q.72 - average dollars spent on Over-the-Counter in a typical month; excluding those who spent "0")

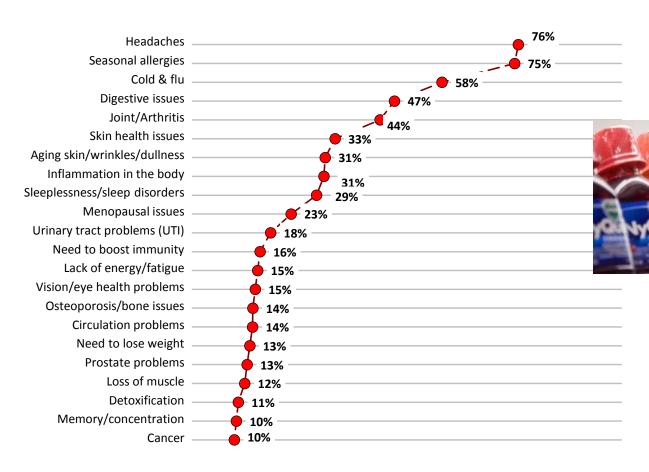
Average dollars spent on Over-the-Counter medications in a month [not including '0']



Headaches and allergies appear to be the top triggers for OTC purchase.

(Q.18 - % condition managers indicating they use OTC to manage their condition)

% condition managers indicating they use OTC to manage their condition

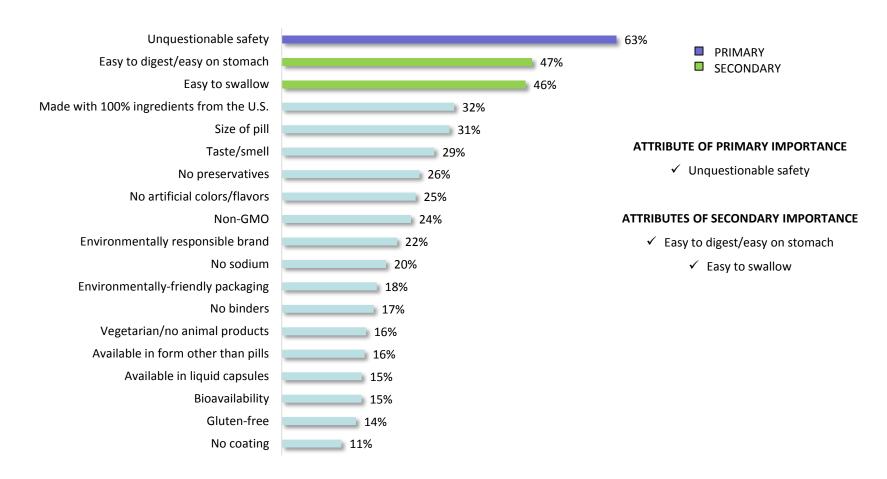




Similar to Rx, "unquestionable safety" is the most important issue when deciding to purchase OTC, followed by ease of use.

(Q.59 - % general population indicating the following are very important in their decision to purchase/use over-the-counter medications)

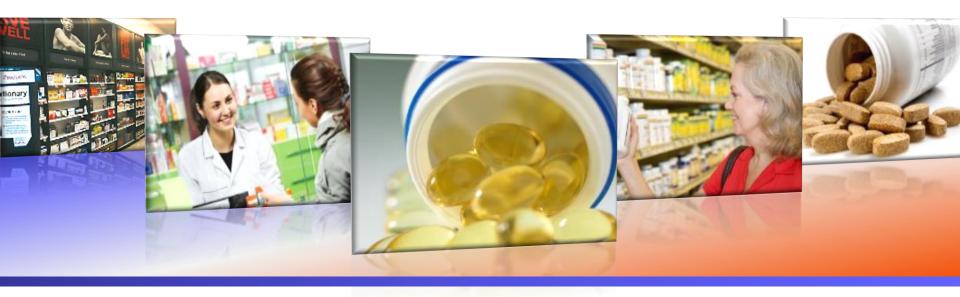
% general population indicating the following are very important in their decision to purchase/use over-the-counter medications





2016 Supplements/OTC/Rx







More information on any subject within this document is available through NMI