Internet Home Alliance

Health and Fitness Needs Assessment Study

September 2003

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Internet Home Alliance
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Background

The Market

- To date, Internet Home Alliance has not conducted any systematic research into the unmet health and fitness needs of consumers. The family ecosystem research completed last year revolved around home technology for streamlining routine tasks or chores, automating household systems, conducting work at home and commuting. Our research for Sunbeam and other companies independent of the Alliance indicates that a number of health and fitness products and services are likely to appeal to many likely adopters of the connected home.

- Mainstream medicine is changing because consumers are spending larger amounts of their income for proactive self-care and self-improvement. Important "consumer-driven" markets involve cardiac and health scanning, medi-spas, specialty services provided by boutique hospitals, and vision care. For consumers with discretionary income to spend, high-end retailers such as Sharper Image offer various health, fitness, and lifestyle products. BodyTrends and Yahoo Shopping also participate in this market with online catalogs. Monitoring products—many with Web components—target body fat, body mass, heart rate, step-counting (pedometers), and weight analysis.

- The main purpose of this study is to identify the most salient consumer needs in the health and fitness area that could be reasonably addressed by products/services with a significant Web component. More specifically, the results will help the Alliance accomplish the following: prioritize consumer needs in this area; determine the relative importance of meeting health and fitness needs compared to other aspects of the family ecosystem and indeed, those of other ecosystems; and gauge the market potential for select products/services within the populations of interest, potentially leading to further ecosystem project work.

- To get a broad perspective on the market, Zanthus, a market research-based consulting firm, conducted a comprehensive Web survey among a cross-section of consumers. Qualified participants had to meet a variety of criteria: be 18-years-old or older; own their home; and earn at least $30,000 annually.

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Background

Objectives

Research objectives addressed by this research include:

- Understand how consumers define health and fitness;
- Gauge the current physical health of all family members, and any recent changes;
- Measure the importance of key health-related activities;
- Determine which strategies and resources consumers currently utilize (or would like to utilize in the future) to in order to manage health issues which are important to them;
- Measure satisfaction with tools currently used to monitor health conditions of importance;
- Identify which, if any, new products consumers would like to have at their disposal for managing important health issues;
- Identify consumers' unmet needs in the health and fitness milieu;
- Gauge reactions to several specific health and fitness product concepts, including: overall appeal, likes and dislikes, standard product evaluation battery, purchase likelihood and expected price.

Methodology

Research Approach

- A Web survey was conducted using a Web panel of consumers. Consumers were invited by email to participate in the survey. To increase survey cooperation, all invited were informed that those who complete the survey were to be automatically entered into a drawing for one of six cash prizes of $100 each.

- 32,000 invitations were sent, of which 3449 visited the survey (11% response rate); of these, 1066 qualified (31% incidence of qualification), and 645 completed the survey (61% completion rate).

- Qualifying criteria:
  - Member of the consumer Web panel,
  - Over 18 years of age,
  - Homeowner,
  - Neither self nor others in household employed in advertising or market research,
  - Earn $30,000 or greater in annual income.

- The average length to complete the survey was 45 minutes; the median was 35 minutes.

- The study was available to those invited 24 hours a day, seven days a week from August 8-21, 2003

- The margin of error associated with a sample size of 645 is +/- 3.9%.

- The data has been weighted to reflect the incidence of Primary and Mass Market consumers in the actual population.

- Unless otherwise specified, bar graphs display top-three box scores and means for responses to questions on a scale from ‘0’ to ’10.’

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Executive Summary

General Health & Fitness Profile

- Most households are in good health (with nearly three-in-five posting an average health rating of 8-10 across all household members). Furthermore, household health has remained strong over the past year.

- Consumers view a wide variety of activities as important to maintaining family health, chief among them sustaining a good diet and eating nutritiously.

- Weight is the most widely monitored health measure (about three-quarters of consumers currently monitor weight, more than for other measures such as blood pressure or cholesterol levels). Most monitor weight via a home scale, and most are very satisfied with that method.

Weight Management

- Those who say managing weight is important to maintaining their health tend to be over their ideal weight (by about 40 pounds on average), with nearly half falling into one of the three Obesity categories using a standard BMI calculation.

- These consumers report they have trouble managing their weight (struggling with losing and regaining the same pounds, never being able to lose at all, or completely giving up). They have typically tried a wide variety of dieting strategies.

Diet & Nutrition

- Those who say diet & nutrition are important to maintaining their health admit that their general eating habits are not as effective as they could be. Most point to a lack of time as the main barrier preventing them from planning and preparing healthier meals.

Executive Summary

Stress, Energy & Emotional Balance

- Many consumers are typically somewhat stressed or low on energy. Women are more likely than men to report their stress level is high, and their energy level and emotional balance are poor. A number turn to physical activity to reduce stress or generate energy, but only about half are very satisfied with their methods of dealing with these conditions.

Exercise & Fitness

- Most of those who rate physical activity as important to maintaining their health are making some progress toward their fitness goals. On average, these consumers engage in some physical or fitness activity 3-4 times per week, with over two-thirds saying they have either been regularly active over the past year or taken steps to become so. Again, lack of time is the greatest barrier to achieving fitness goals, particular lack of time due to work responsibilities.

Chronic Health Conditions

- High blood pressure is the most prevalent chronic condition, affecting over two-in-five of those who say managing a chronic condition is important to maintaining their health. The majority with high blood pressure currently monitor it, typically with a home blood pressure cuff or kit. Most are very satisfied with their method for managing this condition.

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Executive Summary

Home Health Technology

- Several potential home health technology product concepts were tested: the Internet Smart Scale (three versions), the Smart Scale with Wearable Body Monitor, and the Family Health Monitoring System.
- Appeal: The Smart Scale with Body Monitor was most appealing (36% top 3 box ratings), followed by the Smart Scale, (29%) and the Family Health Monitoring System (22%).
- Likes & Dislikes: Among the three basic variations of the Smart Scale tested, the version with the wireless color touch screen monitor is the one preferred most often. This model is preferred by nearly half of consumers (47%) compared to about 32% for the basic version with the large color screen and 21% for the scale with remote. Consumers like the wireless touch screen version because they perceive it will be easier to use with the screen at eye level. They also like the constant monitoring capability of the Smart Scale with Body Monitor, but believe the monitor which facilitates this function would be uncomfortable to wear. Many consumers simply perceive no need for the Family Health Monitoring System.
- Adoption: While the Smart Scale with Body Monitor is the most appealing new home health product tested, it is less likely to be purchased (if cost is no issue) than other versions of the Smart Scale. Estimated Total Addressable Market (among single-family, owner-occupied households) for the various product concepts is shown at right. TAM for all versions is significantly stronger among the IHA Primary market consumers (those who are most likely to adopt the Connected Home).

Product Concept	TAM
Internet Smart Scale Overall	21%
w/Large color screen	14%
w/Large color screen & remote	23%
w/Wireless color touch screen	25%
Smart Scale w/Body Monitor	16%
Family Health Monitoring System	11%

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Executive Summary

Home Health Technology (cont.)

- Product Evaluation Metrics: Overall, across all product concepts tested, consumers are most likely to agree strongly with the notion that the concept is unique and that they would therefore have to be able to try it out before purchasing. Of the three versions of the Smart Scale, the wireless color touch screen version is most likely to be deemed unique.
- Expected Price: Consumers expect that the price for the Family Health Monitoring System will be higher than for all other product concepts.

Product Concept	Mean Exp. Price	Median Exp. Price
Internet Smart Scale Overall	$148	$100
w/Large color screen	$119	$100
w/Large color screen & remote	$164	$120
w/Wireless color touch screen	$161	$120
Smart Scale w/Body Monitor	$175	$125
Family Health Monitoring System	$274	$200

Key Findings

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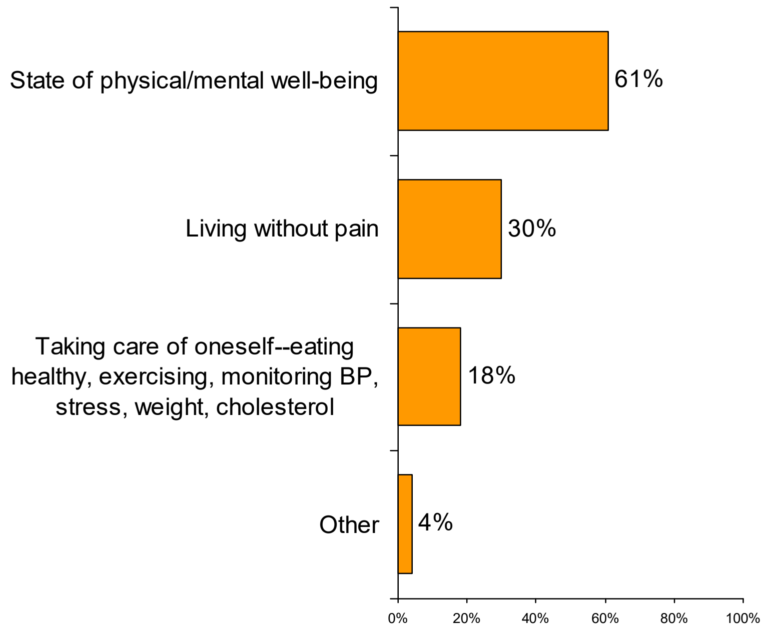
General Health & Fitness Profile

Definition of Personal Health



- Most consumers view personal health as a "state of physical or mental well-being" (61%).
- The definition of personal health appears to evolve with the aging process. For three-in-ten consumers (30%), personal health means living without pain, or not being sick. Older consumers (those aged 45+, 35%) are significantly more likely to subscribe to this definition of personal health than those aged 18-34 (20%).
- Less than two-in-ten (18%) cite proactive measures or activities as a component of personal health (i.e. eating healthy, exercising, monitoring weight, etc.). Women are significantly more likely than men to have this perspective (23% vs. 12%).

(Total n=500; Q5)

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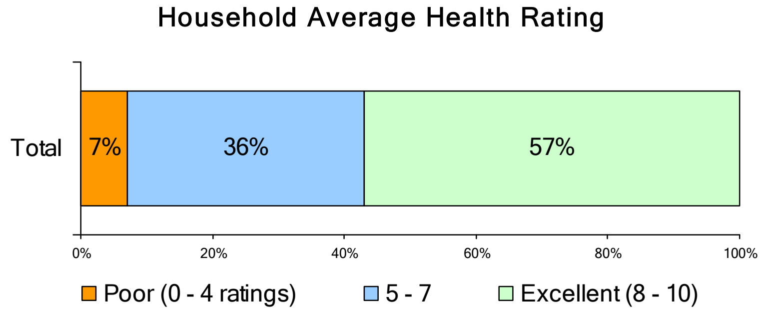
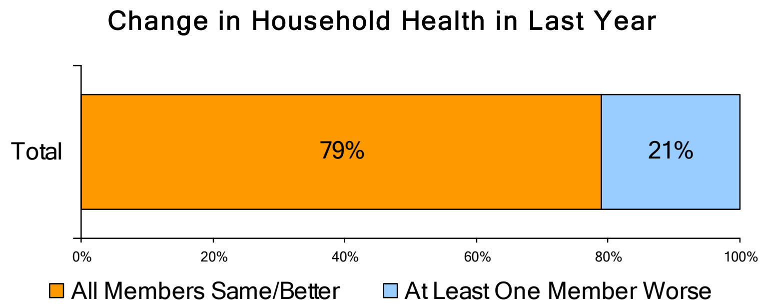
General Health & Fitness Profile

Family Health





- Most families are in good health. Consumers were asked to rate their general physical health, as well as that of each household member. Health ratings were averaged across all family members to derive a household average health rating. More than half of households (57%) achieve an average rating of 8-10, with 10 being excellent.
- Households with children under 18 (65%) are significantly more likely to average 8-10 in terms of household heath than those without children (52%). Households with more education and higher income (graduate degrees, earning $100K or more) also are more likely than their less educated or less well-off counterparts to report this level of health.
- For the most part, household health has remained strong over the past year. About four-in-five (79%) say that compared to one year ago, all members of their household are in the same or better health.

(Total n=643; Q6, Q7)

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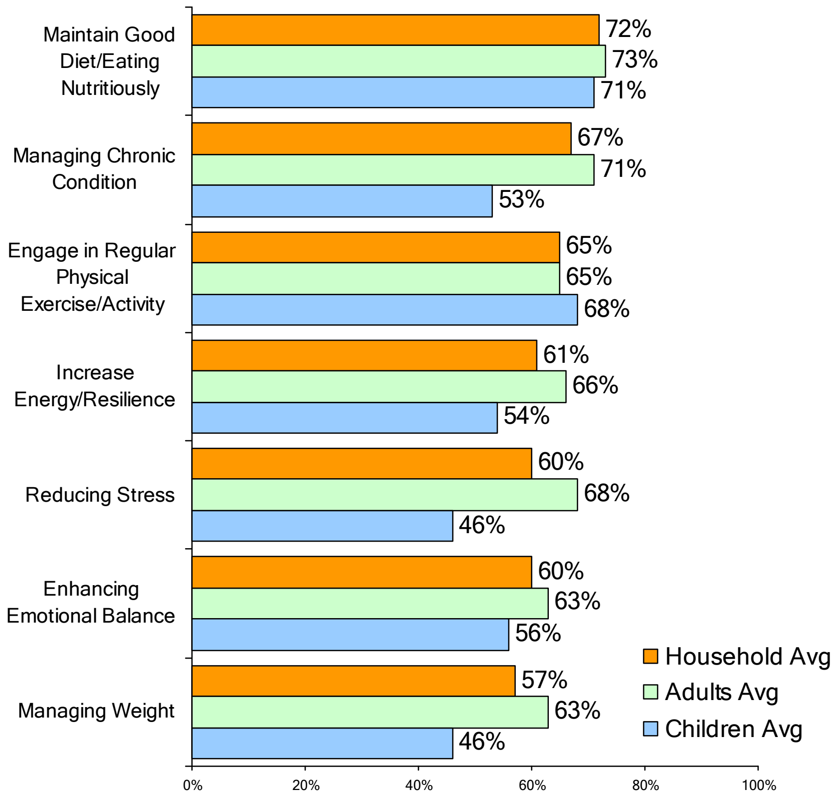
General Health & Fitness Profile

Importance of Activities to Maintaining Health



- Consumers view a wide variety of activities as important to maintaining family health. Consumers were asked to rate the importance of several activities to maintaining their health, as well as that of each household member. Importance ratings were then averaged across all family members, as well as across only adults or only children in the household. The majority of households post an average rating of 8-10 for each activity, with 10 being very important.
- Overall, consumers are most likely to say that maintaining a good diet or eating nutritiously is important. This is equally important for adults and children.
- Activities which are notably more important for adults than children include: managing a chronic condition, increasing energy, reducing stress and managing weight.
- Engaging in regular exercise and managing weight are significantly more likely to be very important to households with incomes of $100K or greater than those earning less.

(Total n=643; Q8 Top 3 Box Scores)

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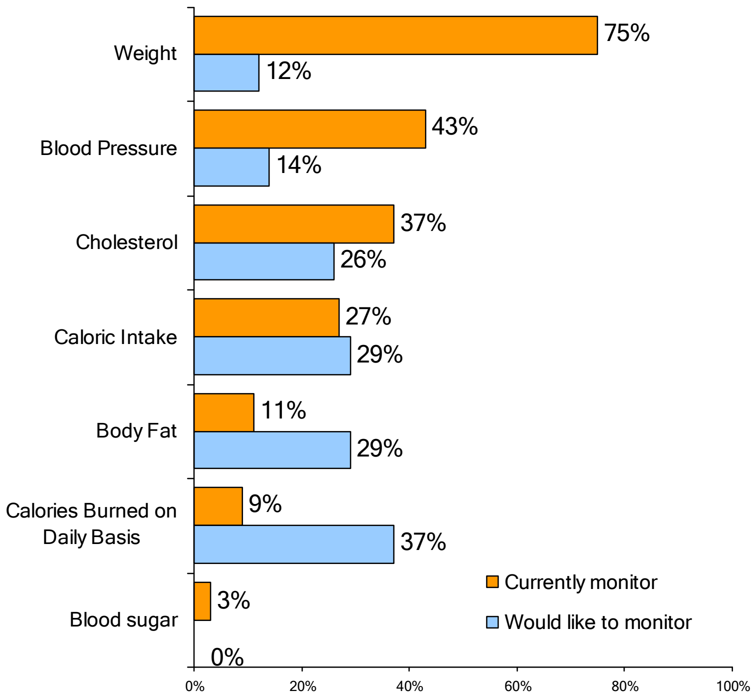
General Health & Fitness Profile

Monitoring of Health Measures



- Those who deemed a health maintenance activity important were asked what health-related measures they (or someone in their household) currently monitored or would like to monitor.
- Weight is the only measure currently monitored by a majority: three-quarters (75%) currently do so. Because weight is so widely monitored, a strong market likely exists for any health technology product which includes a scale component.
- Opportunities for facilitating monitoring activities among consumers include: calories burned on a daily basis, body fat and caloric intake. For each of these, more consumers say they would like to monitor than are currently doing so.
- Only 2% of those responding say they do not currently monitor, nor would like to monitor, any of these measures.

(Total n=560; Q16, Q27, Q33, Q38, Q49, Q56; among those who rated weight management, diet & nutrition, or exercise & fitness important)

General Health & Fitness Profile

Top Current Monitoring Methods

Weight (n=377)	
Use scale	87%
Doctor's visits	6%
The way my clothes fit	3%
Blood Pressure (n=239)	
Personal BP kit, cuff, band, etc.	56%
Doctor's office	33%
BP machine in stores (pharmacy, Walmart, etc.)	17%
Cholesterol (n=202)	
Regular visits with doctor	45%
Blood test	34%
Annual checkup	13%
Caloric Intake (n=143)	
Counting calories	36%
Watch what I eat	23%
Read labels	22%
Keep a food journal	20%
Body Fat (n=61)	
BMI calculator or chart	40%
Trainer/fitness center/gym	29%
Scale	15%
Physician	13%
Calories Burned on Daily Basis (n=49)	
At the gym/working out	28%
With charts	16%
Treadmill/Stairmaster	12%

- Those who currently monitored any of the health measures were asked what methods they used. The top methods for monitoring each measure are listed in the table at left.

(Total n varies; Q17, Q28, Q34, Q39, Q50, Q57; top mentions)

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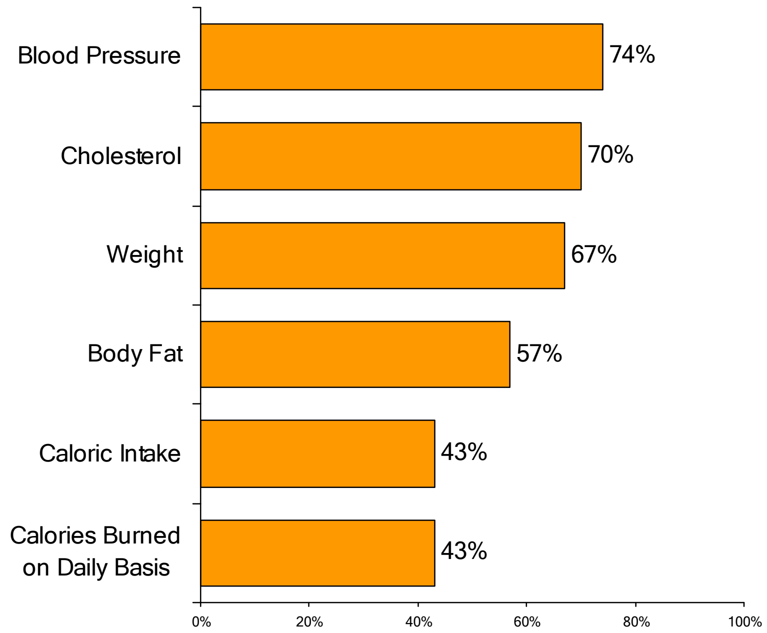
General Health & Fitness Profile

Satisfaction With Current Monitoring Methods



- Those who currently monitored a health measure were asked how satisfied they were with the method they use.
- Overall, consumers appear to be quite satisfied with their current monitoring methods. A strong majority are very satisfied (8-10 ratings) with their method for monitoring blood pressure (74%), cholesterol (70%) and weight (67%).
- Less than one-in-ten are dissatisfied with their method for monitoring any of these health measures.

(Total n=varies; Q17, Q28, Q34, Q39, Q50, Q57; Top 3 box scores)

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Key Findings

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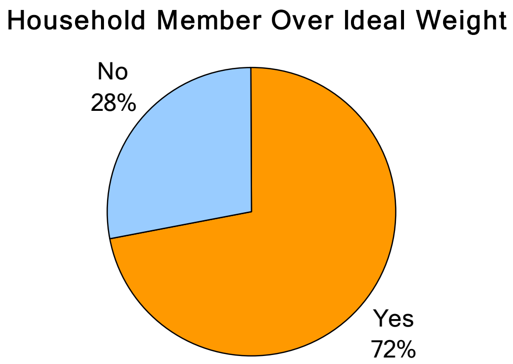
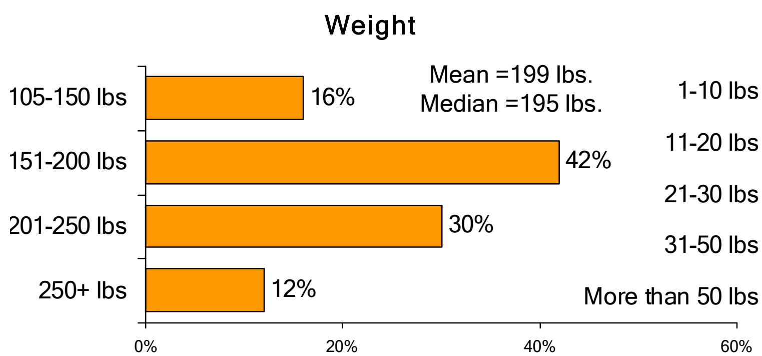
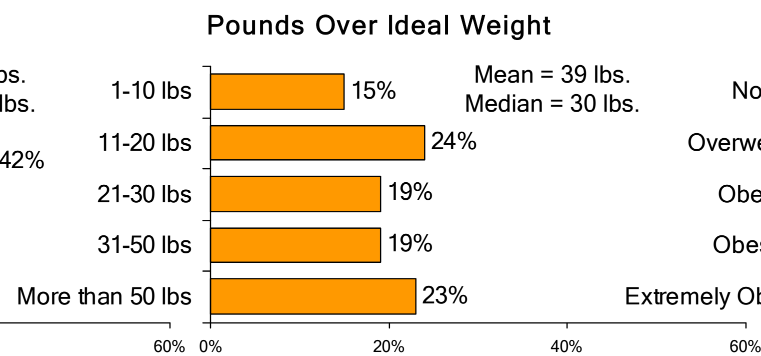
Weight Management

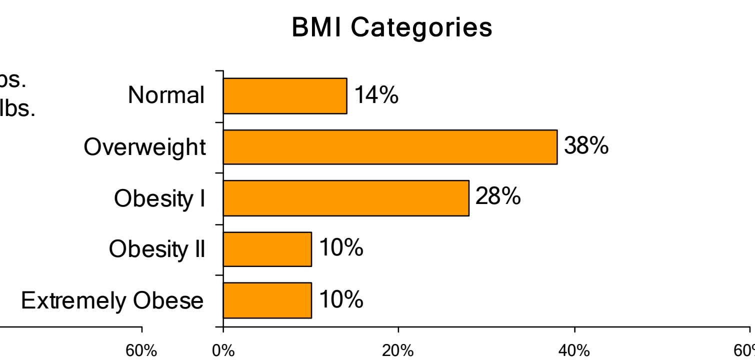
Weight Profile



- Nearly three-quarters (72%) of those who say weight management is important report they are over their ideal weight.
- On average, these consumers say they are over their ideal weight by 39 pounds. Indeed, nearly one-quarter (23%) report being overweight by more than 50 pounds.
- When BMI is calculated for this group, nearly half (48%) fall into one of the three Obesity categories.







(Q9/20, n=533; Q10/21, n=377; Q12/23, n=377)

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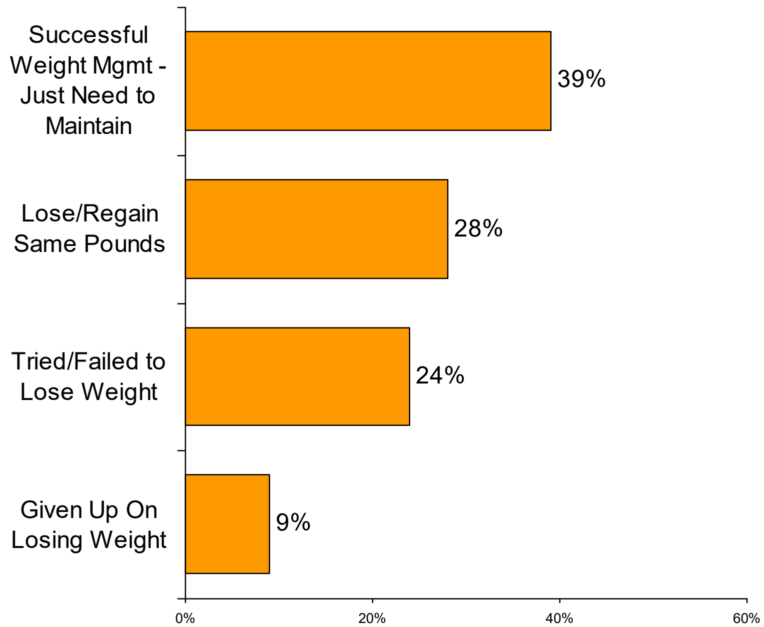
Weight Management

Weight Management Cycle



- For the most part, those for whom weight management is important are not successful in this regard. About three-in-five (61%) cannot manage their weight: either they lose only to regain again, have tried repeatedly without results, or have given up on losing weight altogether.
- Those who have NO children under 18 in the household (44%) are significantly more likely to have been successful at weight management than those who do have children (34%).

(Total n=377; Q13/24)

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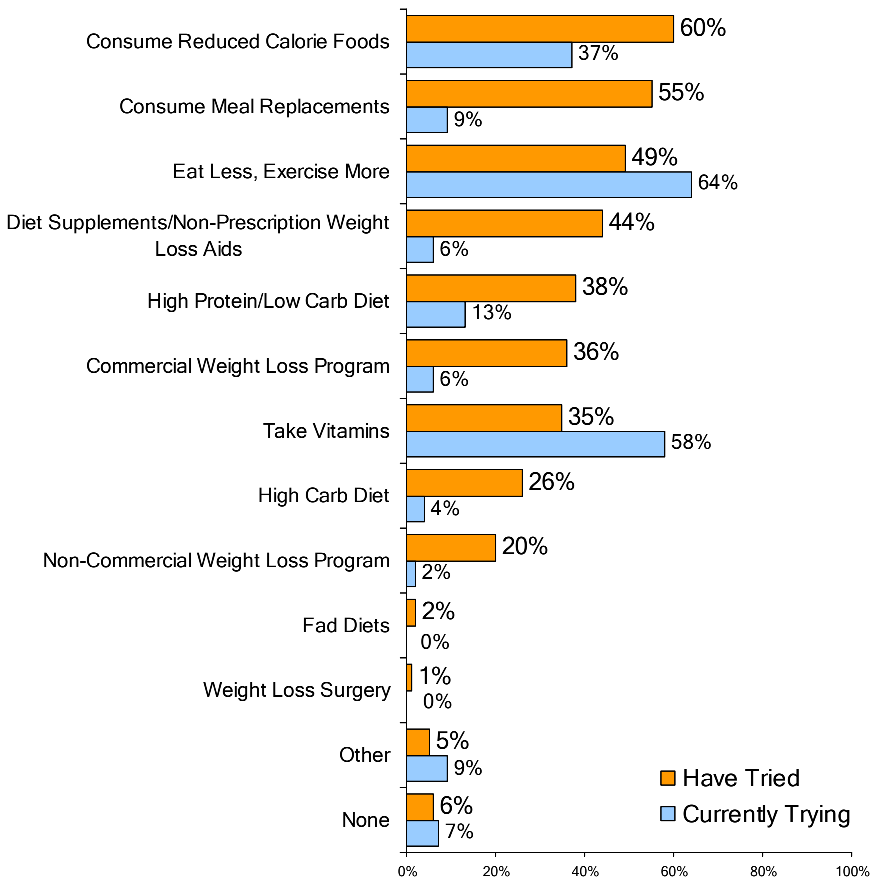
Weight Management

Diet Strategies Used



- Consumers for whom weight management is important have experience with a wide range of dieting strategies.
- The most popular, tried by a majority at some point, are reduced calorie foods (60%) and meal replacements (55%).
- However, when asked what strategy they are currently using, most say they are simply eating less and exercising more (64%) and taking vitamins (58%).

(Total n=377; Q14/25)

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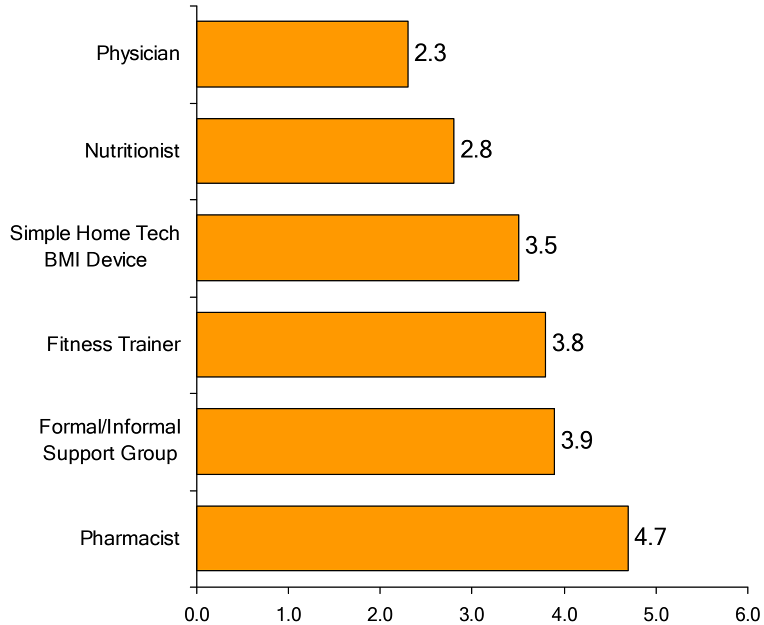
Weight Management

Preferred Resources

Mean Ranking, With #1 Being Most Preferred

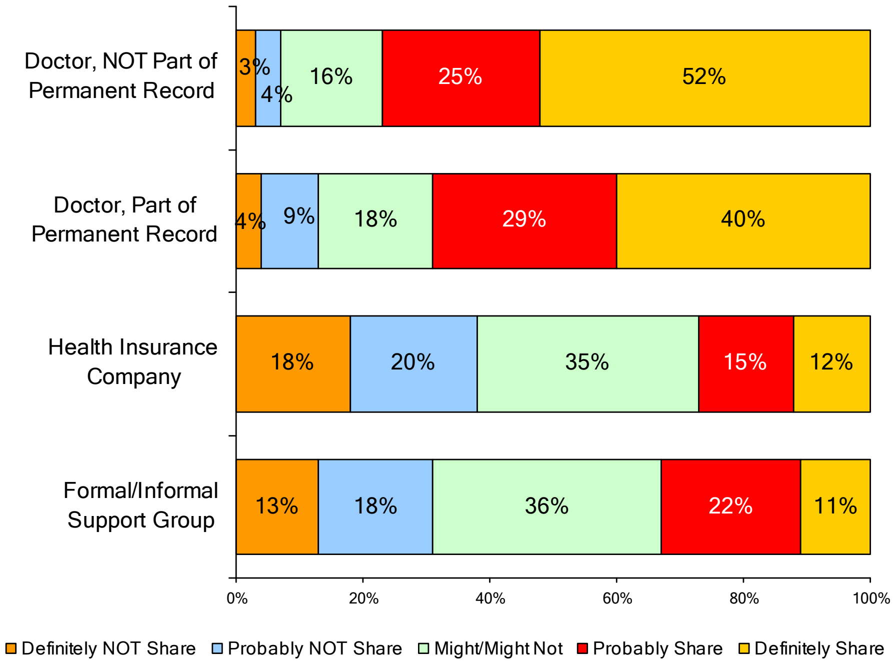


- Of all the available resources consumers might turn to for support when trying to lose weight, physicians are most preferred. Consumers were asked to rate the resources at left, with 1 being their most preferred.
- Fitness trainers rank significantly higher among those under 45 of age.
- Support groups rank significantly higher among females.

(Total n=377; Q15/26)

Weight Management

Willingness to Share Information



- Consumers are willing to share information they might be tracking about health conditions with their doctors, but not with other parties.
- The majority would share such information with their doctor, whether or not it was part of their permanent health record.
- Consumers are slightly more willing to share health information with support groups than their health insurance company.

(Total n=362; Q18/29)

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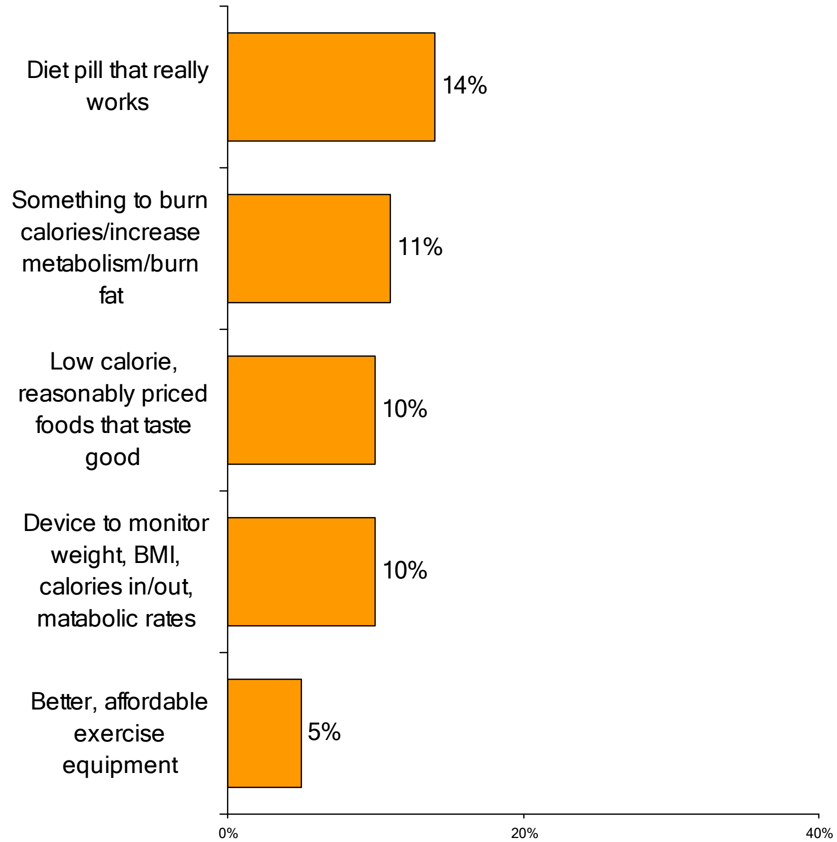
Weight Management

Desired New Products



- In terms of new weight management products, consumers hope for an easy fix: a diet pill that really takes off the pounds!
- About one-in-ten (10%) of those who can think of a new product suggest some sort of device which would monitor such factors as weight, BMI calories eaten/burned or metabolic rates.

(Total n=128; Q19/30)

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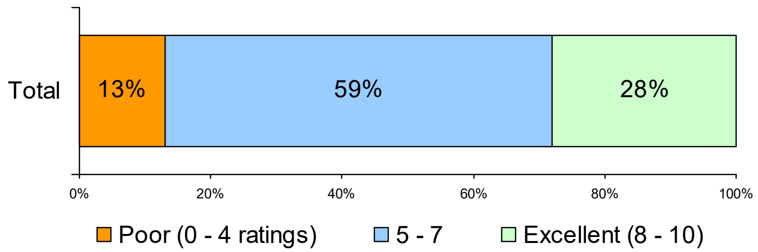
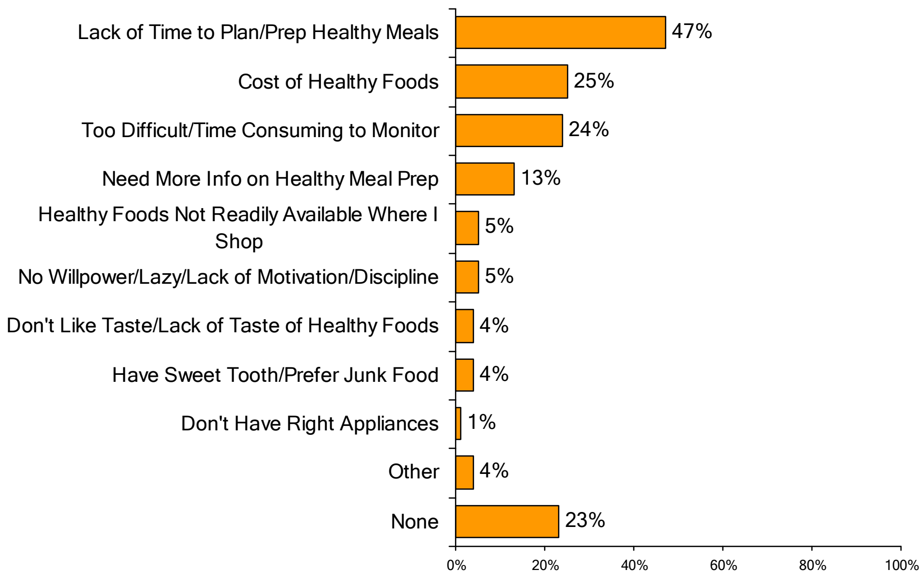
Diet & Nutrition

General Eating Habits



Barriers to Healthy Eating



(Total n=566; Q31/36, Q32/37)

- Most of those who say diet and nutrition are important rate their general eating habits as middle of the road (59% 5-7 ratings, with 10 being excellent).
- Consumers who have completed a graduate degree (38%) are significantly more likely than those with less education (26%) to rate their eating habits as good (8-10 ratings).
- The predominant barrier to eating more healthfully is a lack of time to plan or prepare nutritious meals (47%). This is a significantly greater barrier for those who are under 45, as well as those working full or part-time.
- The cost of healthy foods is also a commonly cited barrier. This factor plays a greater role for those with children under 18 in the household, as well as those earning less than $50K per year.

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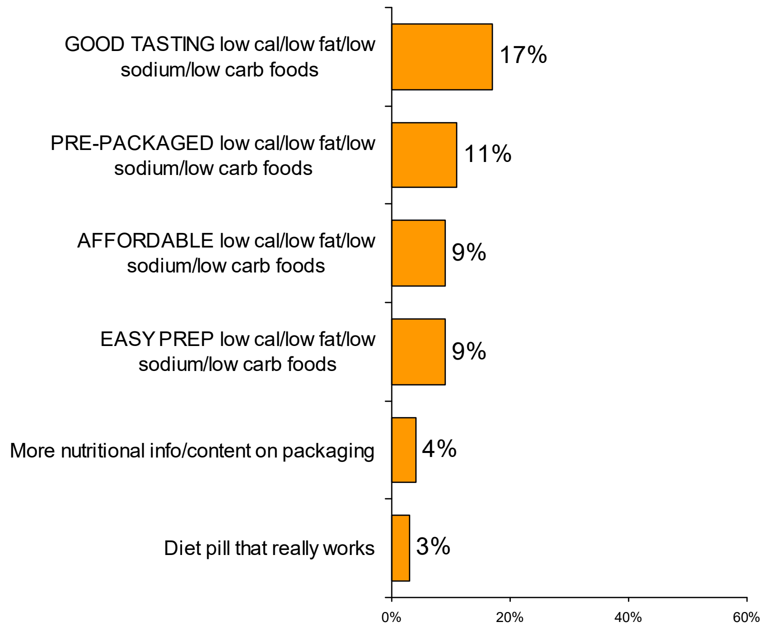
Diet & Nutrition

Desired New Products



- A plurality of consumers call for healthy foods which taste better (17%).

(Total n=192; Q35/40)

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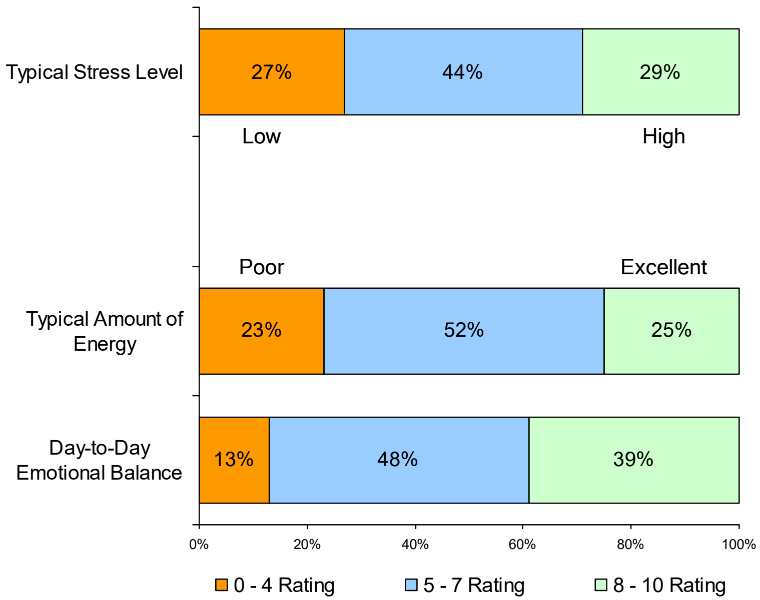
Stress, Energy & Emotional Balance

Typical Levels



- Consumers who said it was important to reduce stress, increase energy and resilience, and enhance emotional balance were asked to rate their current state for each aspect.
- Nearly three-quarters (73%) of those who say reducing stress is important rate their typical stress level as 5 or greater, on a scale from 0 to 10 where 10 is very high. Those who are employed full or part-time are significantly more likely to report high stress than those who are not (32% vs. 20%). Those without children under 18 in the household are significantly more likely than those with kids to say their stress level is low (34% vs. 20%).
- Women are most affected by each of these health issues. Females are significantly more likely to rate their stress level as high than males (34% vs. 23% 8-10 ratings), and significantly more likely than males to rate as low their typical amount of personal energy (27% vs. 19%, 0-4 ratings) and their day to day emotional balance (15% vs. 10%).

(Total n=580; Q41, Q42; 0-10 Scale Where 0=Very Low/Poor and 10=Very High/Excellent)

Stress, Energy & Emotional Balance

Coping Methods Used

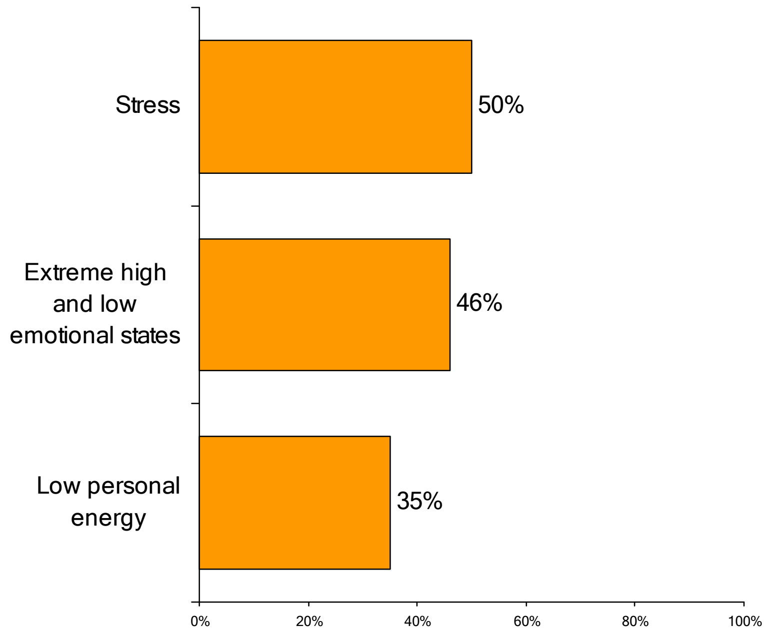
Stress	
Physical outlet: exercise/walk/play sports/yardwork/outdoor activity	26%
Meditation/relaxation/deep breathing/yoga	23%
Avoid stressful situations/ignore it	9%
Talk w/family, friends, colleagues, etc.	6%
Prayer/reading the Bible/go to church	6%
Yell/vent/scream	6%
Read books	6%
Eat	5%
Isolate myself	5%
Low Personal Energy	
Take a nap/sleep/get enough rest	42%
Physical outlet: exercise/walk/play sports/yardwork/outdoor activity	18%
Work through it	9%
Eat sugar/high energy foods	8%
Better diet	7%
Vitamins	7%
Drink coffee/caffeine	6%
Extreme High & Low Emotional States	
Work it out/just deal with it	17%
Meditation/relaxation/deep breathing/yoga	9%
Talk w/family, friends, colleagues, etc.	9%
Medication/vitamins	6%
Sleep/rest	5%
Physical outlet: exercise/walk/play sports/yardwork/outdoor activity	5%

- Those who said it was important to reduce stress, increase energy and resilience, and enhance emotional balance were asked how they typically deal with each condition. The top methods are listed in the table at left.

(Total n=580; Q43)

Stress, Energy & Emotional Balance

Satisfaction With Coping Methods

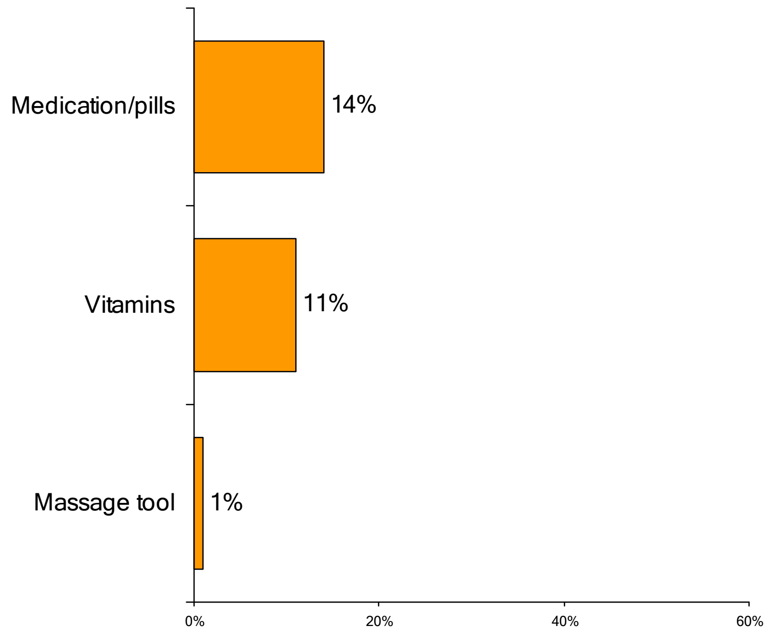


- Consumers who said it was important to reduce stress, increase energy and resilience, and enhance emotional balance were asked how satisfied they were with their typical method of dealing with each condition.
- Consumers are somewhat satisfied with their method of coping. About half are very satisfied (8-10 ratings) with their method for dealing with stress (50%) and extremes of emotion (46%). They are less likely to be satisfied with how they address low energy.

(Total n=580; Q43; Top 3 box scores)

Stress, Energy & Emotional Balance

Desired New Products



- The most often-mentioned new product to help consumers deal with stress, low energy or emotional swings include medication (14%) and vitamins (11%).

(Total n=168; Q44)

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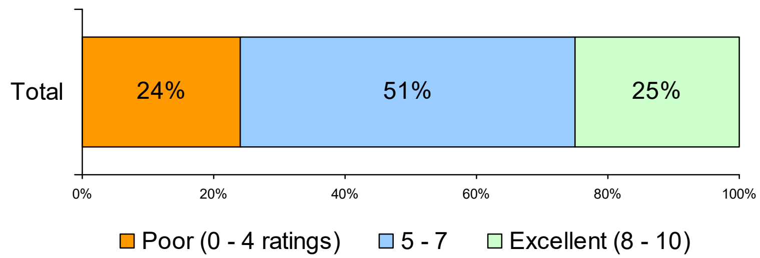
Exercise & Fitness

Progress Toward Achieving Fitness Goals



- Among those who rate physical activity as important to their general health, most are making some progress toward achieving their fitness goals.
- One-quarter (25%) believe they are making excellent progress (8-10 ratings). Those with no children under 18 in the household (28%) are significantly more likely to be making excellent fitness progress than those with children (21%).

(Total n=537; Q45/52)

Exercise & Fitness

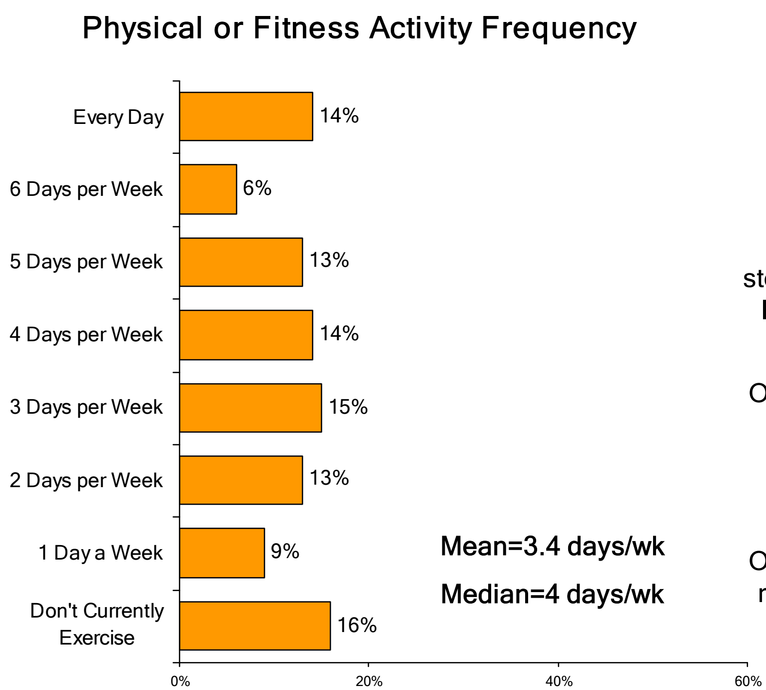
Level of Activity

- As shown in the charts on the following page, those for whom physical activity is important fit in some sort of exercise 3-4 days per week, on average. Those with children under 18 in the household (19%) are significantly more likely to say they do not currently exercise than those without children (12%).

- The majority of these consumers have either been regularly active over the last year, or taken steps to become so (69%). Males (43%) are significantly more likely than females (34%) to say they have been regularly active, while those with NO children in the household (43%) are significantly more likely than those with kids (31%) to have been regularly active.

Exercise & Fitness

Level of Activity



(Total n=537; Q46/53, Q47/54)

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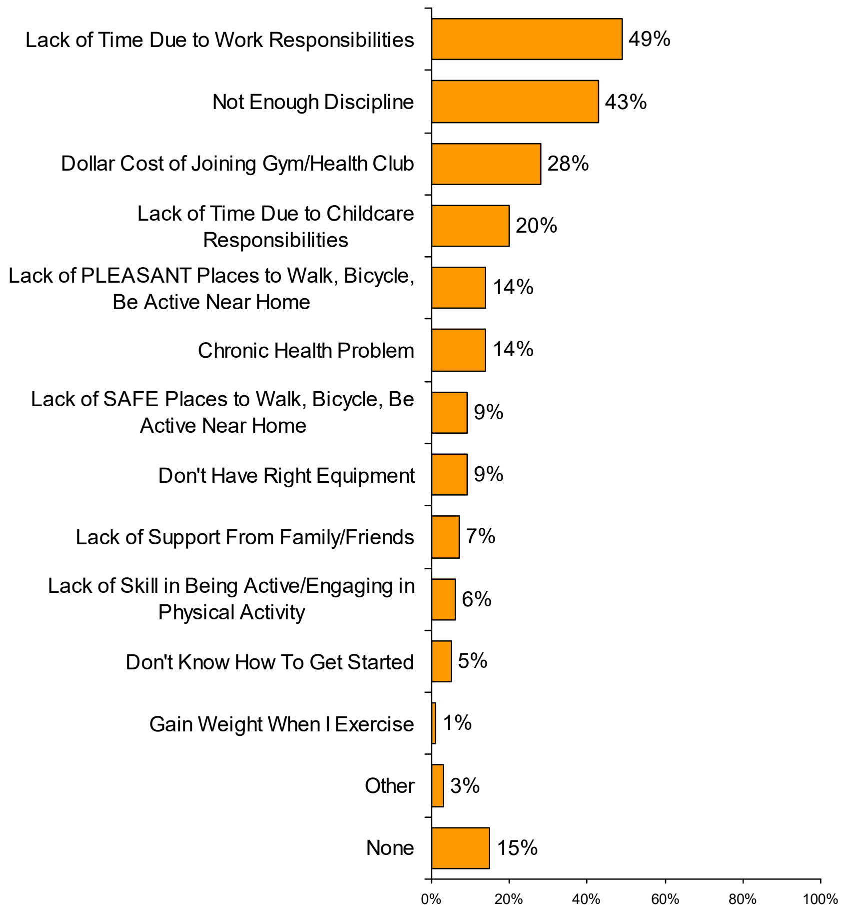
Exercise & Fitness

Barriers to Exercise

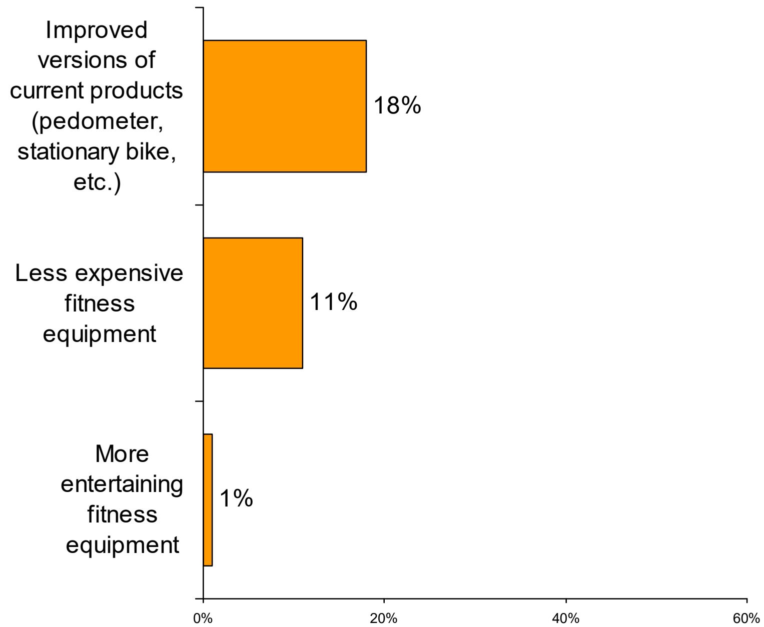


- Lack of time and self-discipline are the biggest barriers to engaging in regular fitness activity.
- Lack of time may be due to work (49%) or childcare responsibilities (20%). Lack of time due to work is naturally a more significant issue for those working full or part-time (66%), earning $100K or more (75%), or aged less than 55 years (57%).

(Total n=537; Q48/55)

Exercise & Fitness

Desired New Products



- Consumers who rate physical activity as important are most likely to suggest new fitness products which represent improvements on equipment currently available (such as a more ergonomic stationary bike, or a better-designed pedometer).

(Total n=122; Q51/58)

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Key Findings

- General Health & Fitness Profile
- Weight Management
- Diet & Nutrition
- Stress, Energy & Emotional Balance
- Exercise & Fitness
- **Chronic Health Conditions**
- Home Health Technology Products
- Consumer Market Profile
  - Demographics
  - Technology Adoption Patterns
- Appendix

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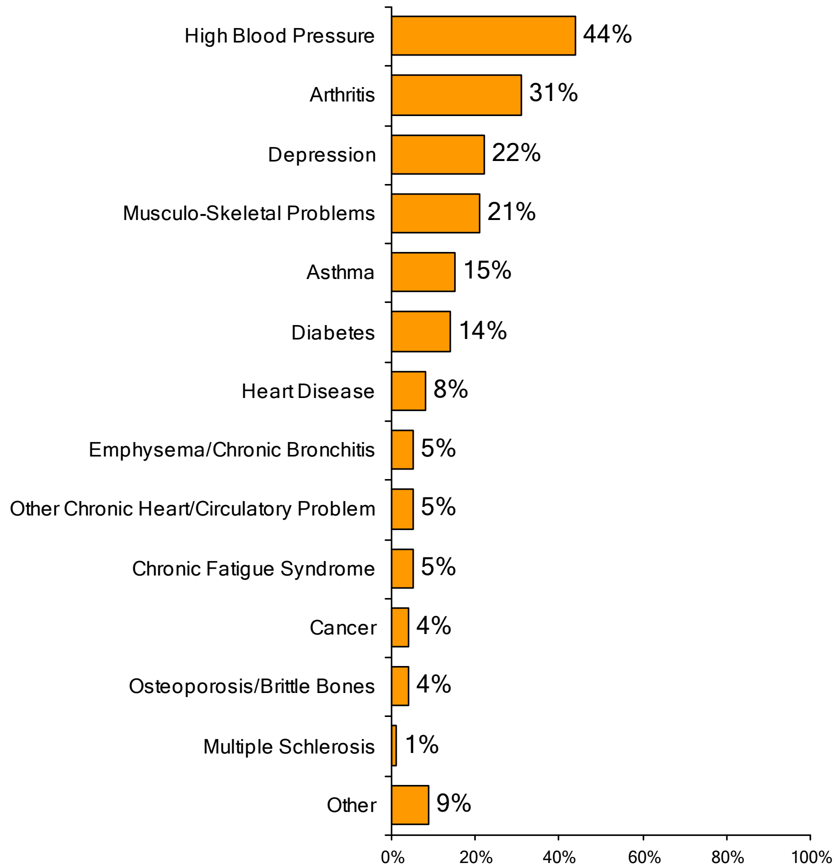
Chronic Health Conditions

Prevalence of Conditions



- High blood pressure is the most prevalent chronic condition, affecting over two-in-five (44%) of those who rate managing a chronic condition important. High blood pressure is a significantly greater issue among consumers aged 55 or older (60%) than those who are younger than 55 (35%).

(Total n=523; Q59/64)

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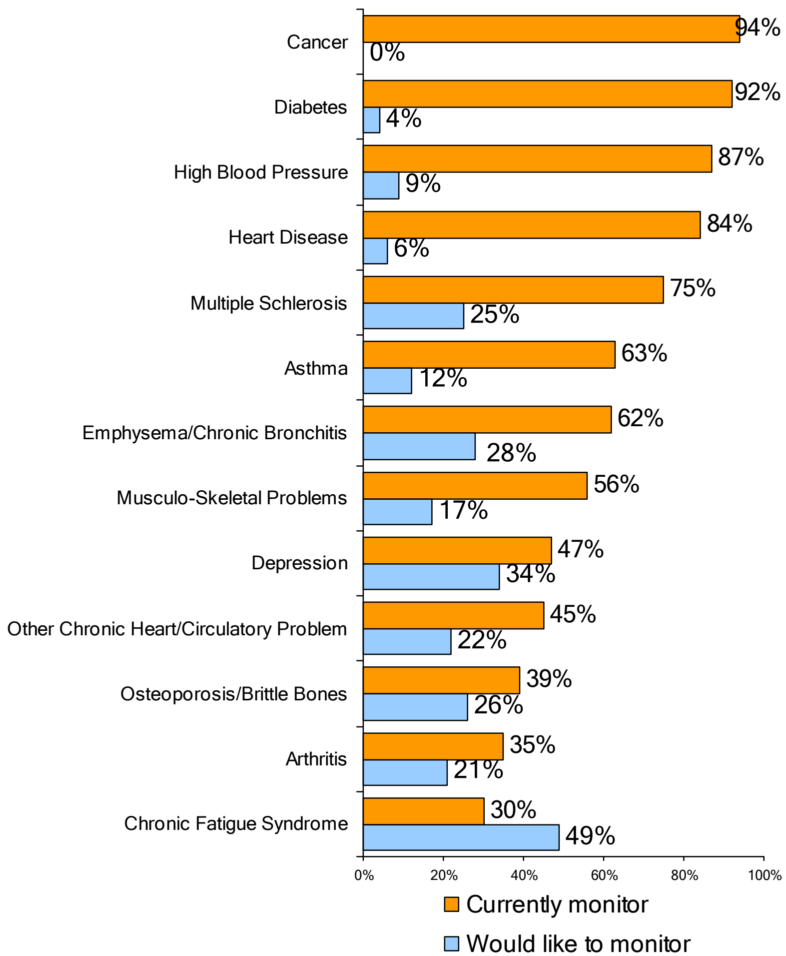
Chronic Health Conditions

Level of Monitoring of Conditions



- Among those with a chronic condition, it's typical that the condition is currently monitored.
- Chronic Fatigue Syndrome is the one condition for which patients are more likely to say they would like to monitor it than are currently doing so.

(Total n varies; Q60/65)

Chronic Health Conditions

Monitoring Methods

Cancer	
Regular doctor's visits	94%
Blood work	15%
Diabetes	
Blood glucose monitoring	91%
Regular doctor's visits	20%
Diet	7%
Medication/pain relievers	7%
High Blood Pressure	
Personal/home BP kit	55%
Regular doctor's visits	29%
Medication/pain relievers	22%
Annual physical/yearly exam	7%
Heart Disease	
Regular doctor's visits	80%
Asthma	
Regular doctor's visits	40%
Medication/pain relievers	36%
Inhaler	17%
Depression	
Medication/pain relievers	55%
Regular doctor's visits	28%
Counseling	13%
Arthritis	
Regular doctor's visits	40%
Medication/pain relievers	30%
Chiroprator	6%

- Those who currently monitor a chronic condition were asked how they typically do so. The top methods are listed in the table at left.
- For most conditions, regular doctor's visits play a key monitoring role.

(Total n=xxx; Q61)

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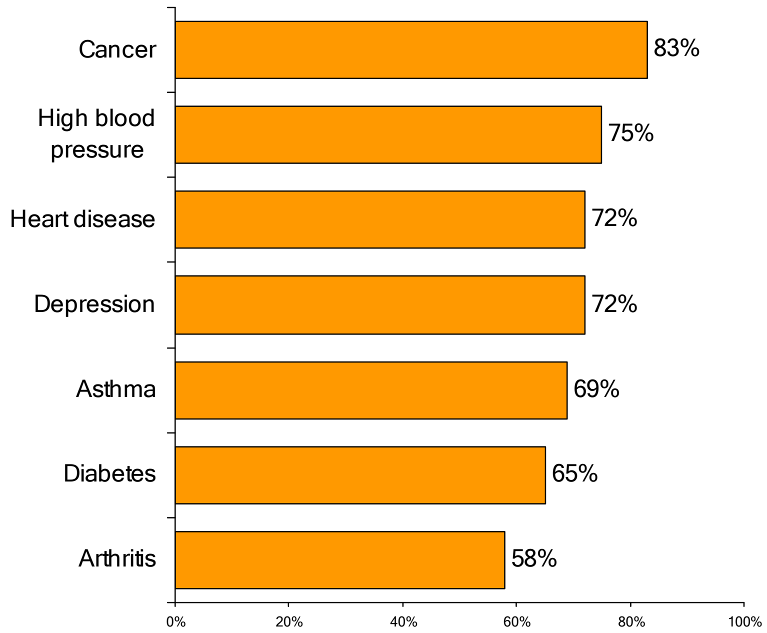
Chronic Health Conditions

Satisfaction With Monitoring Methods



- Those who currently monitored a chronic condition were asked how satisfied they were with the method they use.
- Overall, consumers appear to be quite satisfied with their current monitoring methods. Three-quarters or more are very satisfied (8-10 ratings) with their method for monitoring cancer (83%) and high blood pressure (75%).

(Total n=varies; Q61)

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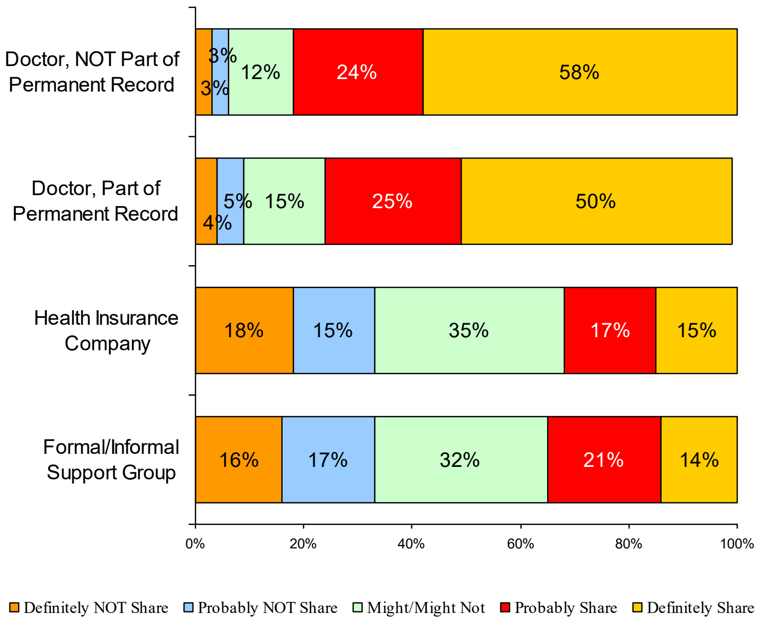
Chronic Health Conditions

Willingness to Share Information

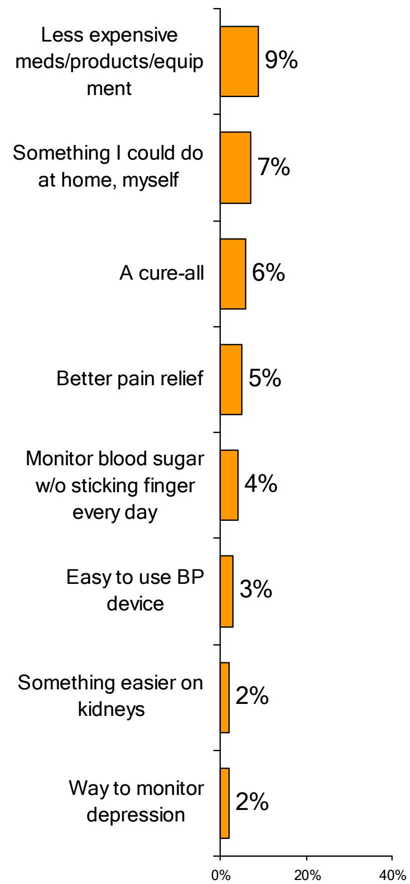


- Those monitoring a chronic condition would be considerably more willing to share monitoring information with their doctor (whether or not it became part of their health record) than with their health insurance company or a support group.

(Total n=385; Q62/67)

Chronic Health Conditions

Desired New Products



- Desired new products for chronic health conditions are, understandably, closely linked to the nature of the condition itself.
- However, some directional patterns do appear, such as the desire for less expensive monitoring solutions (9%), or those that can be done at home, by the individual (7%).

(Total n=92; Q63)

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Key Findings

- General Health & Fitness Profile
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- Chronic Health Conditions
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- Consumer Market Profile
  - Demographics
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- Appendix

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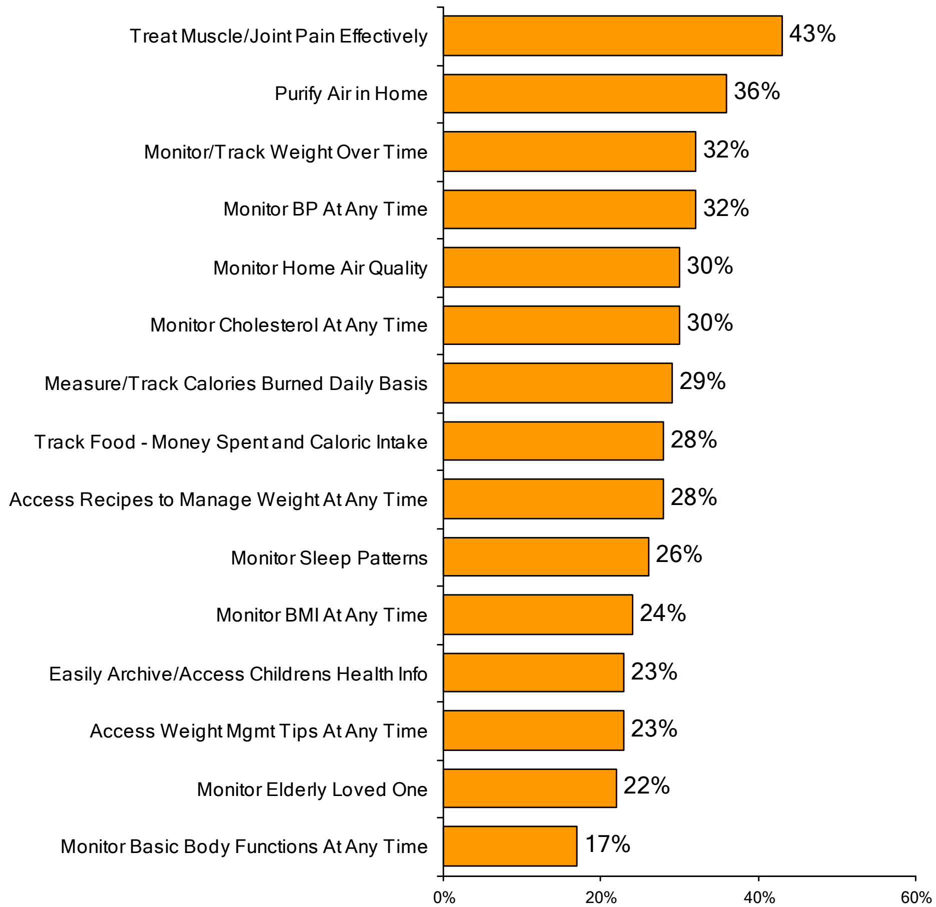
Home Health Technology Products

Interest in Health Maintenance Activities



- All survey participants were asked their interest in a variety of health maintenance activities, regardless of what was important to their households.
- The ability to treat muscle and joint pain effectively generated the most interest (43% 8-10 ratings). This is of notably more interest to those 55 and older (51%) than those under 55 (40%).
- Home air quality also garnered a strong degree of interest: 36% are very interested in purifying the air in their home, while 30% are interested in monitoring home air quality. Those with children in the home are somewhat more interested (although not significantly so) in these air quality measures than those without children.
- About one-third are very interested in monitoring and tracking weight over time (32%), and in monitoring their blood pressure and cholesterol at any time (30% each). This is consistent with the previously-reported high percent of consumers who currently monitor their weight, or who report high blood pressure as a chronic condition.

(Total n=643; Q69; Top 3 box scores)

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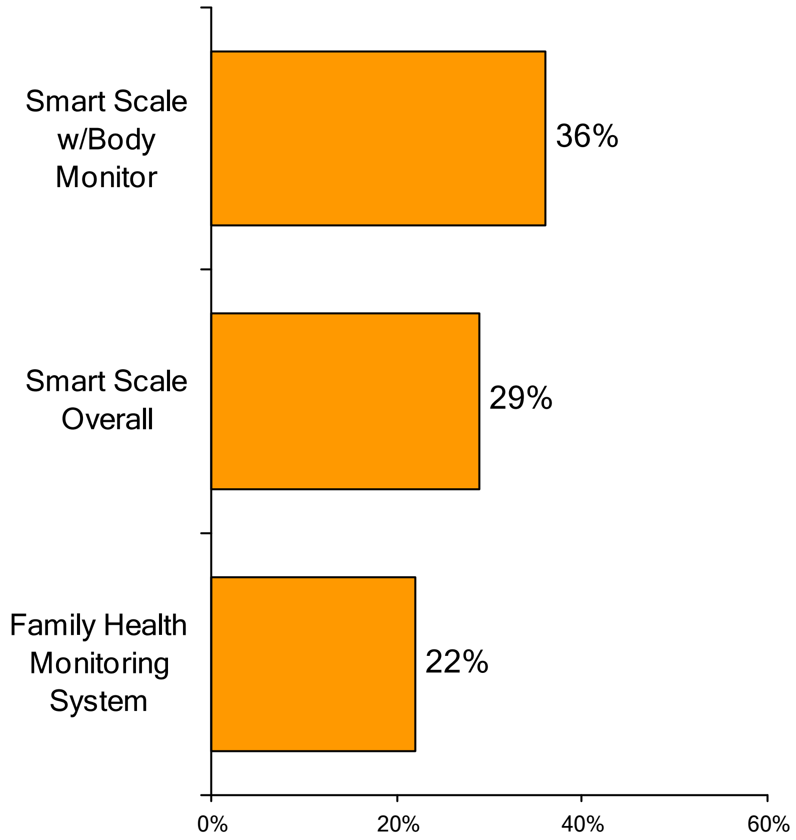
Home Health Technology Products

Overall Appeal: All Product Concepts



- Survey participants were presented with descriptions and graphical illustrations for several potential new home health technology products. (Product descriptions can be found in the Appendix.)
- The chart at left compares the top 3 box overall appeal scores for each. The Smart Scale with Wearable Body Monitor concept is most appealing (29% 8-10 ratings).

(Top 3 Box Scores)

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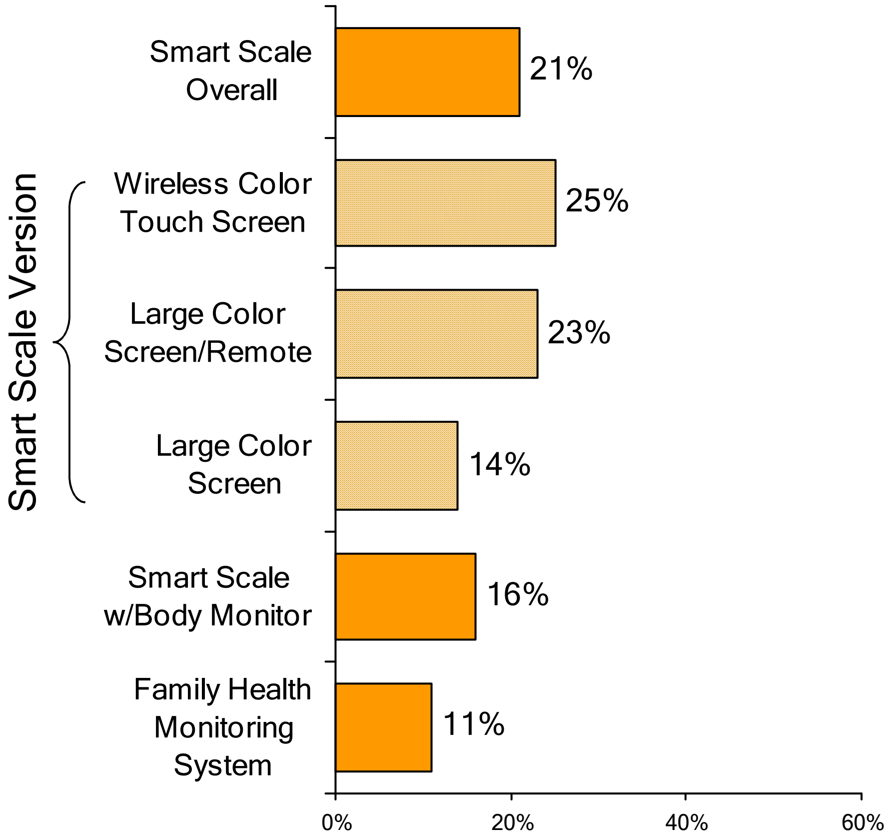
Home Health Technology Products

Adoption: All Product Concepts



- Consumers were also asked how likely they would be to purchase their preferred Smart Scale version, assuming cost was not an issue.
- The chart at left compares the Total Addressable Market (TAM) for each. (Product descriptions can be found in the Appendix.)
- Although the Smart Scale with Body Monitor is most appealing overall, consumers are most likely to purchase the Smart Scale without a body monitor.
- Of the three versions of the Smart Scale, that with the Wireless Color Touch Screen draws the highest TAM (25%).
- Diffusion of innovations literature suggest that new product concepts that garner an estimated TAM of 15% to 25% are viable prospects. Products at this level have a strong chance to achieve the critical mass necessary for wider, self-sustaining adoption. Those with rates higher than 25% have a strong chance of success, while those with rates lower than 15% have a low chance of success.

•*Note: All adoption rates in this report were calculated by discounting self-reported purchase intent in a scenario where cost was not an issue. The discount factor (a standard 70-30-10 rule), is designed to account for the 'demand characteristic'–the tendency for more survey respondents to say they will purchase a new product than, in fact, actually do so.*

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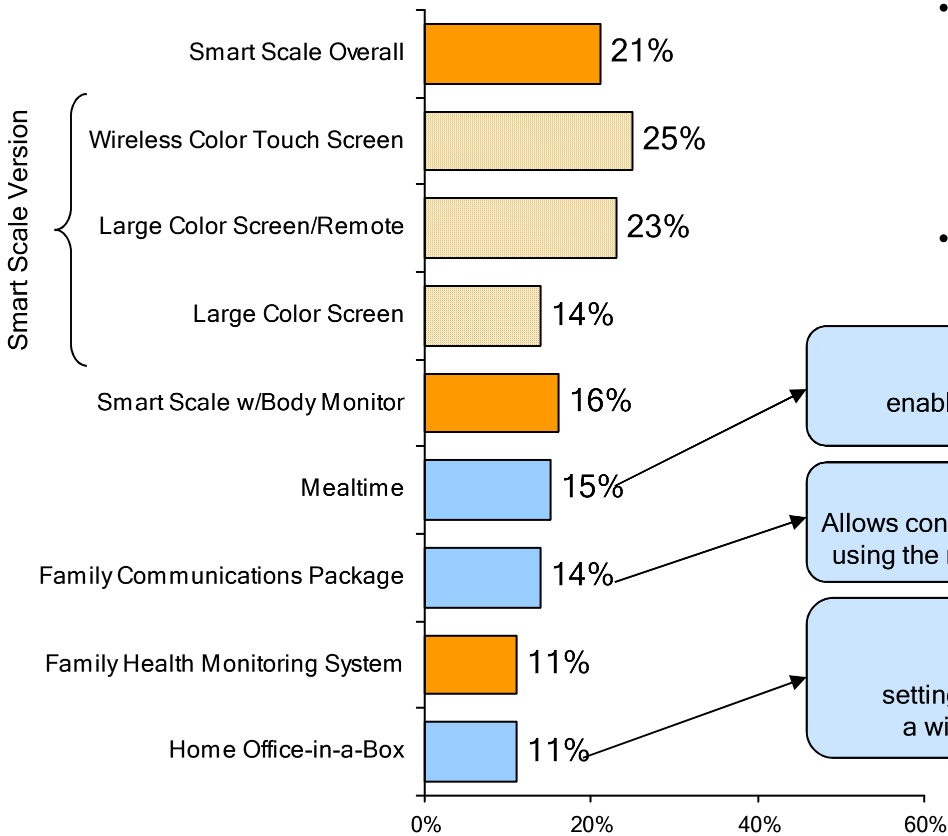
Home Health Technology Products

Adoption: Compared to Other IHA Concepts



- It may be useful to compare the performance of these product concepts with others which the IHA tested in its Concept Evaluation Study (July 2002). The chart at left compares the Total Addressable Market for each.
- In this context, the Smart Scale concept still outperforms other tested concepts

Mealtime: A networked kitchen appliance system that enables consumers to coordinate meal prep to suit their daily schedule.

Family Communications Package:
Allows consumers to communicate with family members anytime, anywhere using using the most suitable combination of standard and limited function cell phones.

Home Office-in-a-Box:
A comprehensive package of products and services for setting up a modern home office, including high-speed Internet access, a wireless network, a VPN and access to a personalized Web portal.

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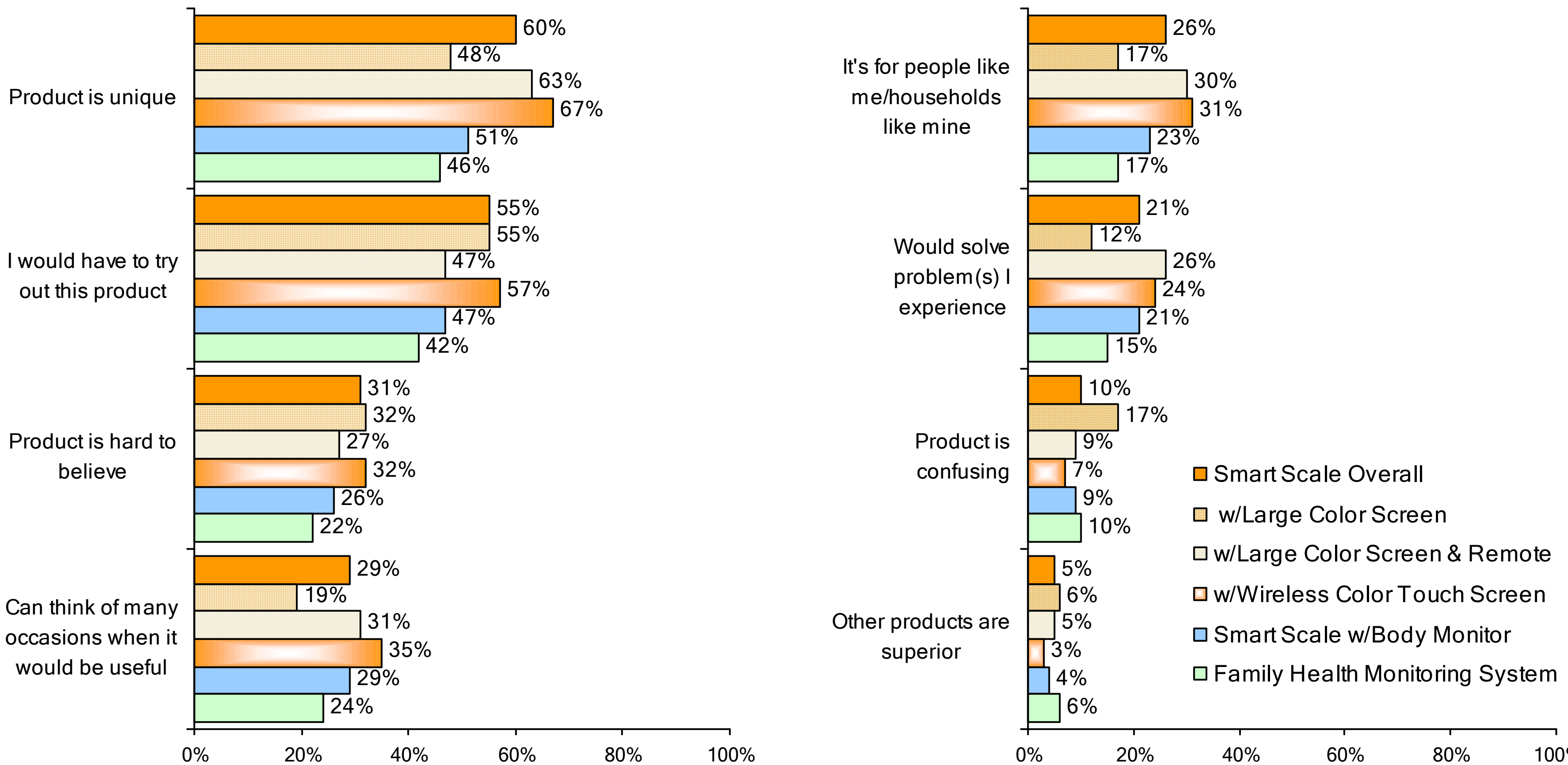
Home Health Technology Products

Product Evaluation Metrics: All Products



(Top 3 Box Scores)

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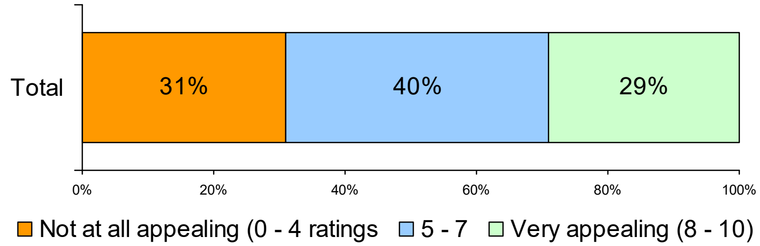
Home Health Technology Products

Smart Scale Appeal



Smart Scale Likes	
Information it stores/provides	15%
Variety of features/functions in one unit	13%
Can store info for multiple users	11%
Goal setting tools/management	9%
Easy to use	8%
Large, readable color screen/easy to read	8%
Looks neat, nice, interesting, appealing	6%
Internet connectivity	4%
Tracking info over time	4%
BMI/body fat measurements/readings	3%
Smart Scale Dislikes	
Cost/probable high cost	14%
Uploading info to Internet/Internet connection	14%
Too much involved/time consuming/complicated	12%
Everything/don't like anything	5%
Concerned about confidentiality of info	4%
That doctor/trainer has access to info	3%
Too much info	3%

(Total n=643; Q70)

- About three-in-ten consumers (29%) find the basic Smart Scale concept appealing (please see Appendix for full product descriptions). Those with no children in the household (34%) are significantly more likely to find the Smart Scale unappealing than those with children (27% 0-4 ratings).
- Consumers find appeal in the Smart Scale's ability to store and provide information, and its multi-feature functionality.
- They are concerned about its potential cost and uncertain about the Internet connection.

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Smart Scale Preference

- After reading the basic Smart Scale description, survey participants were presented with two additional variations on the product: a Smart Scale with large color screen and remote control, and a Smart Scale with a wireless color touch screen. (Please see Appendix for full product descriptions.)

- As shown on the following page, nearly half of consumers (47%) prefer the version of the Smart Scale with the wireless color touch screen. This version is preferred because it offers the ability to view and use the scale at eye level, which is perceived to be easier and more comfortable. Those with a graduate degree (59%) and who are employed full or part-time (53%) are significantly more likely to prefer the Smart Scale with wireless color touch screen than those with less education or different employment status. This version also seems to appeal more strongly to younger consumers, particularly those under 35. Finally, the Primary market (60%) leans strongly toward this wireless version, significantly more so than the Mass market (38%).

- The basic Smart Scale with the large color screen (32%) is preferred over the version with the remote control (21%). Those who select the basic version do so because of its simplicity and lower expected cost.

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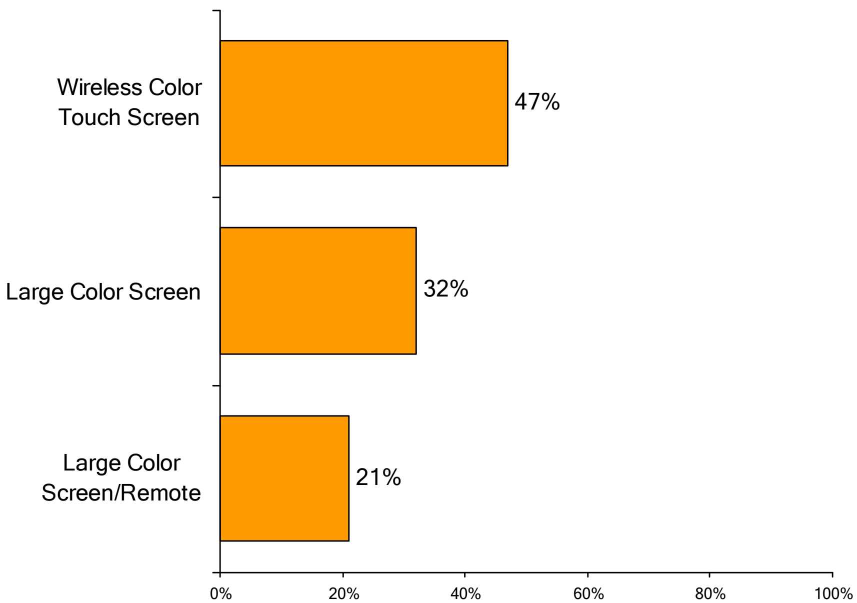
Home Health Technology Products

Smart Scale Preference

Prefer Smart Scale With...



Reasons for Preference

Smart Scale With Wireless Color Touch Screen	
Ability to view/use at eye level	24%
Ease of use	23%
Easier to read	14%
Convenience/no need to bend over	11%
Wireless	6%
Touch screen makes input easy	5%
Smart Scale With Large Color Screen	
Don't need bells & whistles	14%
Less complicated	13%
Easier to read	13%
Ease of use	11%
Cost will be lower	10%
All in one unit	7%
Large color screen	3%
Smart Scale With Large Color Screen/Remote	
Ease of programming with remote/like remote	29%
Ease of use	20%
Just liked it better/more appealing (general)	8%
Convenience/no need to bend over	6%
Large color screen	4%

(Total n=643; Q73, Q74)

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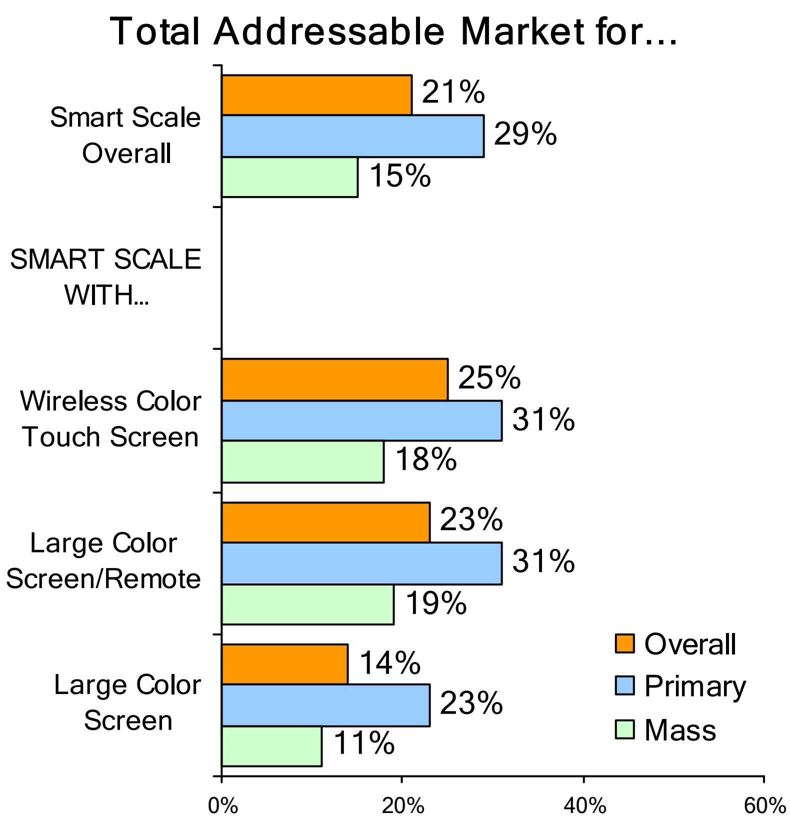
Home Health Technology Products

Smart Scale Adoption

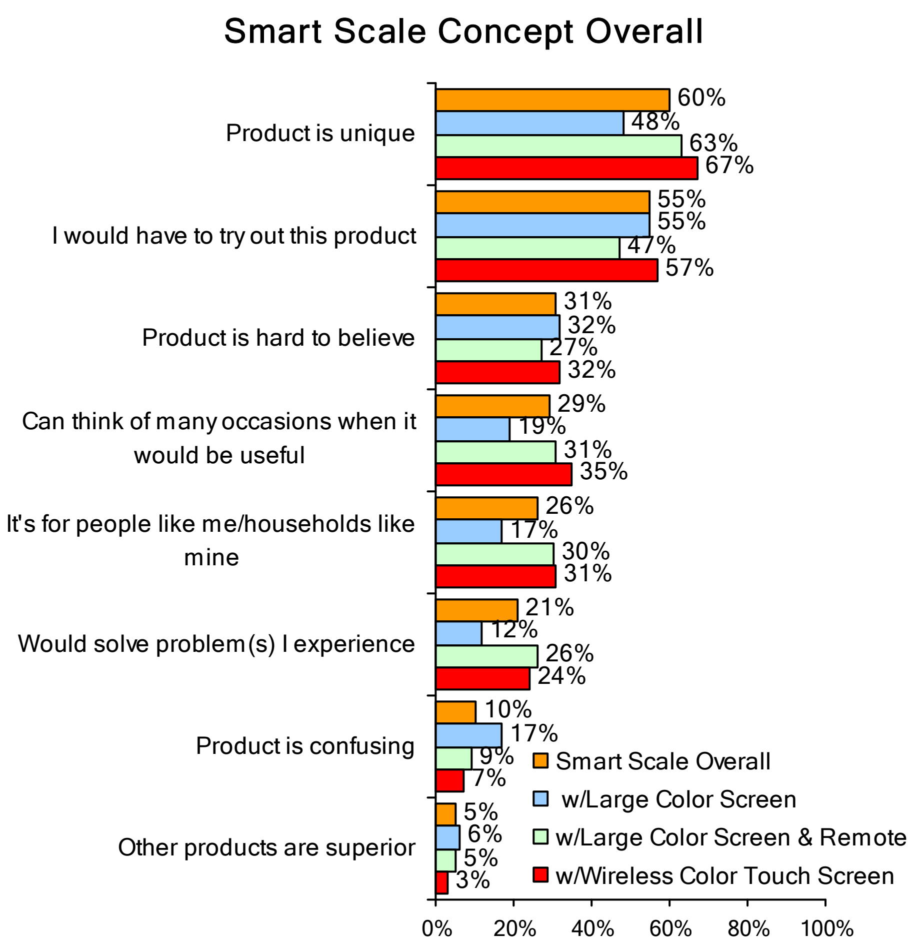


- Consumers were asked how likely they would be to purchase their preferred Smart Scale version, assuming cost was not an issue.
- Overall TAM for the Smart Scale is 21%. TAM for the most preferred version, the Smart Scale with wireless color touch screen, is somewhat stronger, at 25%.
- For all versions, estimated TAM is significantly higher among the IHA's Primary market (those consumers who are generally quicker to adopt new technology and find the Connected Home concept appealing).
- *Note: All adoption rates in this report were calculated by discounting self-reported purchase intent in a scenario where cost was not an issue. The discount factor (a standard 70-30-10 rule), is designed to account for the 'demand characteristic'—the tendency for more survey respondents to say they will purchase a new product than, in fact, actually do so.*

(Total n=643; Q82)

Home Health Technology Products

Smart Scale Product Evaluation Metrics

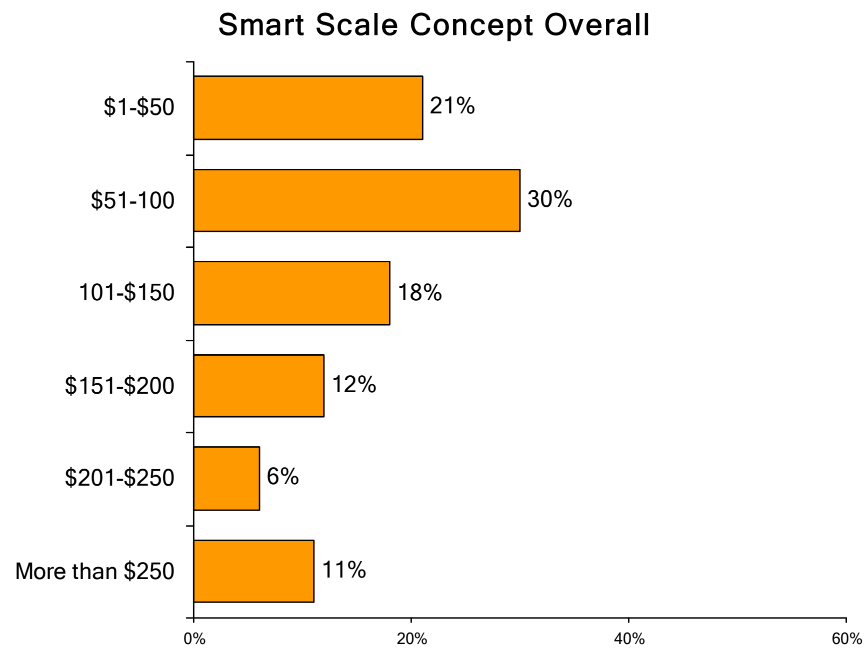


(Total n=643; Q75; Top 3 Box Scores)

- Consumers rated each potential home health technology product along a standard battery of product evaluation metrics.
- The Smart Scale is perceived as quite unique (60% 8-10 ratings, where 10 means strongly agree). Given its uniqueness, it is no surprise that over half (55%) say they would have to try it out or know someone who had one before considering it for themselves.
- All versions of the Smart Scale are rated quite similarly on this battery, with uniqueness and need to trial always the top two metrics. However, both the version with the wireless color touch screen and that with the remote control (67% and 63% 8-10 ratings respectively) were rated notably more unique than the basic version (48%).

Home Health Technology Products

Smart Scale Expected Price



Model	Mean	Median
Smart Scale Overall	$148	$100
w/Large color screen	$119	$100
w/Large color screen & remote	$164	$120
w/Wireless color touch screen	$161	$120

(Total n=643; Q83, Q84)

- On average, consumers expect to pay at least $100 for the Smart Scale.
- The mean expected price for the versions of the Smart Scale with the remote control ($164) or with the wireless color touch screen ($161) are considerably higher than for the basic version ($119).
- For all Smart Scale versions, females expect to pay more than males, on average, while those without children expect to pay more than those with children.
- Overall, about 10% would purchase the Smart Scale at their expected price. As when cost is no issue, TAM is highest at expected price for the Smart Scale with wireless color touch screen (12%).

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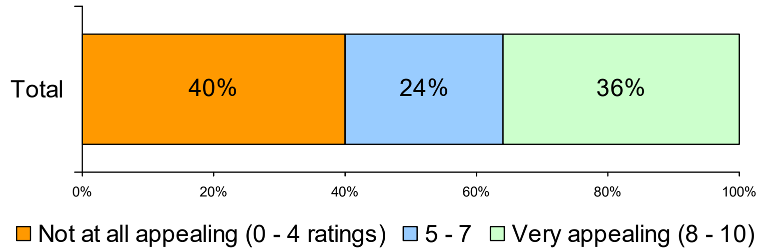
Home Health Technology Products

Smart Scale With Body Monitor Appeal



Smart Scale With Body Monitor Likes	
Constant monitoring	13%
Wearable body monitor	10%
Info collected and available	9%
Monitors/displays calories burned	9%
Convenience/ease of use	7%
Can store info for multiple users	3%
Small size/portability	3%
Tracking capability	2%
Wireless/wireless updates	1%
Smart Scale With Body Monitor Dislikes	
Uncomfortable/cumbersome/wouldn't want to wear	27%
No need/not interested	9%
Internet access/security issues	6%
Cost/probable high cost	6%
Too technical/advanced/too much "stuff"	6%
Too time consuming	1%
Wearable body monitor	1%

(Total n=643; Q85)

- Over one-third of consumers (36%) find the Smart Scale with Body Monitor concept appealing (please see Appendix for full product descriptions). However, just as many (40%) find it unappealing.
- Consumers like the Smart Scale's constant monitoring ability. Conversely, a sizeable share (27%) perceive that the body monitor (which enables that constant monitoring function) would be uncomfortable or bulky to wear.

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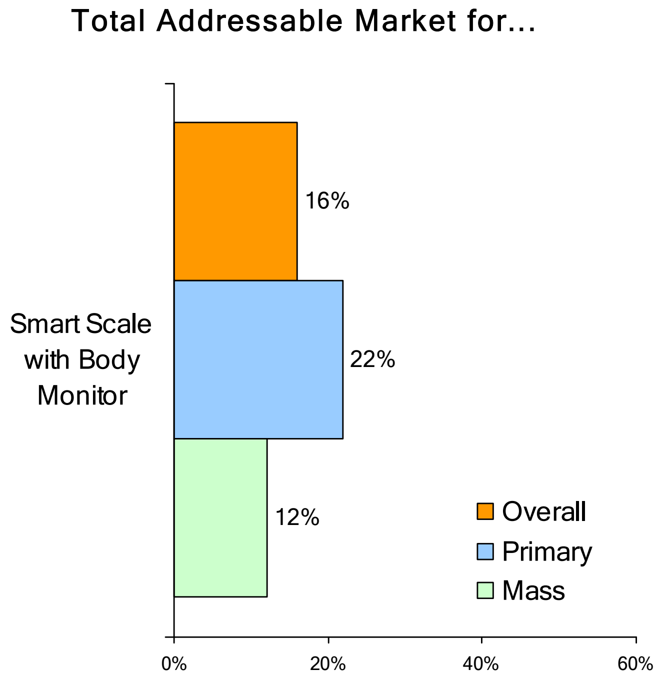
Home Health Technology Products

Smart Scale With Body Monitor Adoption



- Consumers were asked how likely they would be to purchase the Smart Scale with Body Monitor, assuming cost was not an issue.
- Overall TAM for the Smart Scale with Body Monitor is 16%.
- IHA Primary market consumers exhibit significantly stronger demand for this product than the Mass market.
- *Note: All adoption rates in this report were calculated by discounting self-reported purchase intent in a scenario where cost was not an issue. The discount factor (a standard 70-30-10 rule), is designed to account for the 'demand characteristic'–the tendency for more survey respondents to say they will purchase a new product than, in fact, actually do so.*

(Total n=643; Q95)

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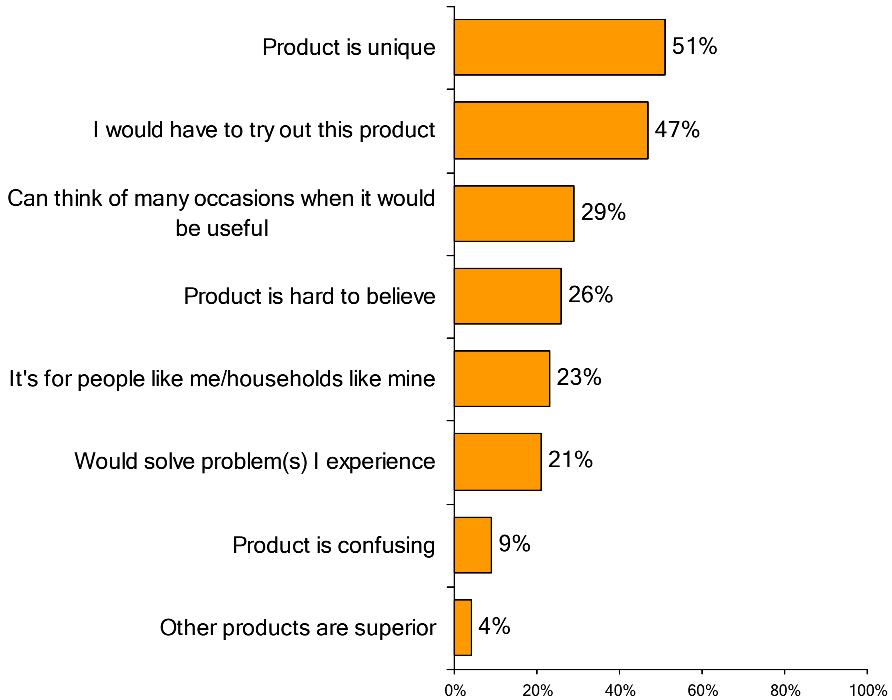
Home Health Technology Products

Smart Scale With Body Monitor Product Evaluation Metrics



- The Smart Scale with Body Monitor is perceived as fairly unique (51% 8-10 ratings, where 10 means strongly agree). Given its uniqueness, it follows that nearly half (47%) say they would have to try it out or know someone who had one before considering it for themselves.

(Total n=643; Q88; Top 3 Box Scores)

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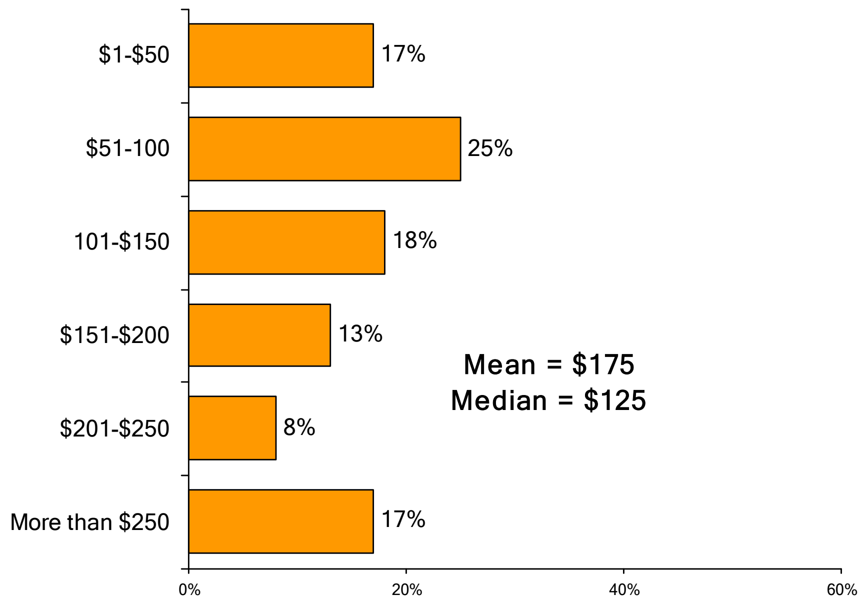
Home Health Technology Products

Smart Scale With Body Monitor Expected Price



- On average, consumers expect to pay $175 for the Smart Scale with Body Monitor.
- Females expect to pay more for the Smart Scale with Body Monitor than males (on average), as do those with more income or education.
- Overall, about 8% would purchase the Smart Scale with Body Monitor at their expected price (a 50% drop from TAM if cost is no issue).

(Total n=643; Q96, Q97)

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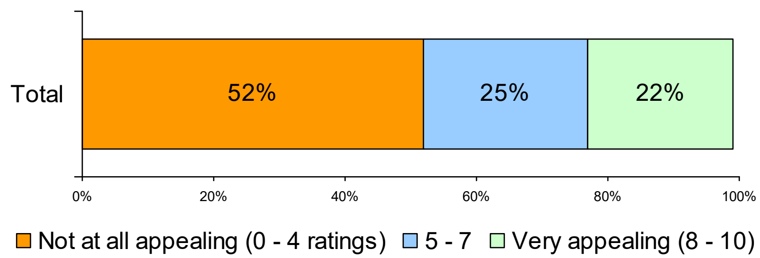
Home Health Technology Products

Family Health Monitoring System Appeal



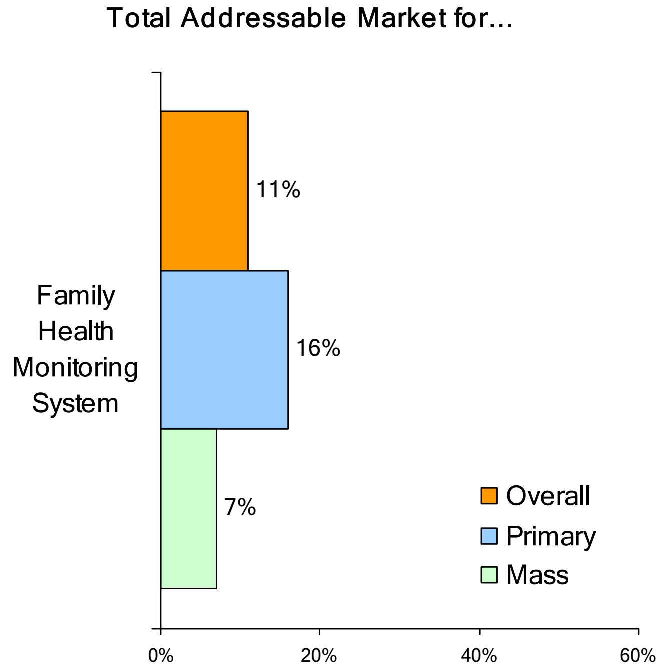
Family Health Monitoring System Likes	
Info collected and available	27%
Can store info for multiple users	13%
Constant monitoring	6%
Convenience/ease of use	5%
Wireless/wireless updates	2%
Family Health Monitoring System	
No need/not interested	21%
Internet access/security issues	16%
Too technical/advanced/too much "stuff"	12%
Everything/don't like anything	4%
Too time consuming	4%

- Most consumers rate the Family Health Monitoring System as unappealing (52% 0-4 ratings). (Please see Appendix for full product descriptions). Less than one-quarter (22%) find it appealing.
- Those with NO children under 18 in the household are significantly more likely to find the system unappealing than those with children (57% vs. 48%). However, even among those with children, nearly half (48%) do not find the product appealing.
- Consumers find appeal in the system's ability to collect information and make it available. However, one-in-five (21%) simply have no need for such a system, and 16% voice concern over the security issues associated with the Internet.

(Total n=643; Q98)

Home Health Technology Products

Family Health Monitoring System Adoption



- Consumers were asked how likely they would be to purchase the Family Health Monitoring System, assuming cost was not an issue.
- Overall TAM for the Smart Scale with Body Monitor is 11%, the lowest of all products tested.
- Again, IHA Primary market consumers show significantly higher demand for this product than Mass market consumers.
- *Note: All adoption rates in this report were calculated by discounting self-reported purchase intent in a scenario where cost was not an issue. The discount factor (a standard 70-30-10 rule), is designed to account for the 'demand characteristic'–the tendency for more survey respondents to say they will purchase a new product than, in fact, actually do so.*

(Total n=643; Q108)

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Home Health Technology Products

Family Health Monitoring System Product Evaluation Metrics

- The Family Health Monitoring System is perceived as fairly unique (46% 8-10 ratings, where 10 means strongly agree). Consequently, many (42%) say they would have to try it out or know someone who had one before considering it for themselves.

(Total n=643; Q101; Top 3 Box Scores)

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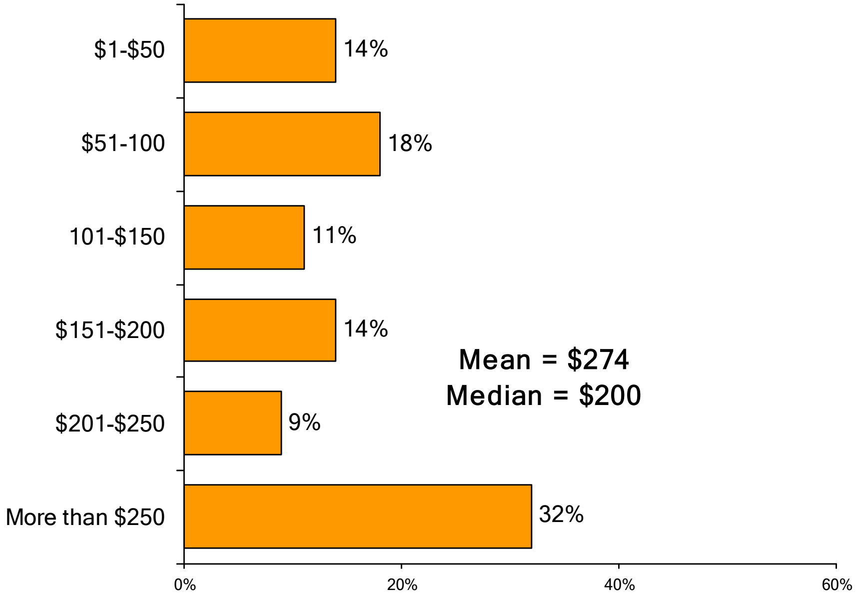
Home Health Technology Products

Family Health Monitoring System Expected Price



- On average, consumers expect to pay $274 for the Family Health Monitoring System, considerably more than for the other products tested. About one-third (32%) would expect to pay over $250 for the system.
- Those with more income or education expect to pay more for the system than their counterparts.
- Overall, about 6% would purchase the Smart Scale with Body Monitor at their expected price.

(Total n=643; Q109, Q110)

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Key Findings

- General Health & Fitness Profile
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Consumer Market Profile

Demographics

Total			
Age (n=643)		**Marital Status (n=643)**	
18 - 24	2%	Married	70%
25 - 34	17%	Divorced	11%
35 - 44	27%	Never married	11%
45 - 54	26%	Unmarried, living together	5%
55 +	28%	Widow(er)	3%
Education (n=643)		Separated	1%
High School Graduate	17%	**Gender (n=643)**	
Vocational or trade school	14%	Male	53%
Some College	27%	Female	47%
College Graduate	25%	**Income (n=643)**	
Attended Graduate School	6%	\$30,000 - \$39,999	25%
Graduate Degree	11%	\$40,000 - \$49,999	18%
Employment Status (n=643)		\$50,000 - \$59,999	17%
Full-time	56%	\$60,000 - \$74,999	23%
Part-time	9%	\$75,000 - \$99,999	11%
Homemaker	10%	\$100,000 - \$124,999	5%
Student	1%	\$125,000 - \$149,999	3%
Retired	15%	**Adults in HH (n=643)**	
Unemployed	3%	Mean	2.0
Disabled	2%	**Children in HH (n=275)**	
Self employed	2%	Mean	1.7

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Consumer Market Profile

Demographics (cont.)

IHA Primary Market			
Age (n=643)		**Marital Status (n=643)**	
18 - 24	1%	Married	67%
25 - 34	20%	Divorced	11%
35 - 44	26%	Never married	12%
45 - 54	27%	Unmarried, living together	6%
55 +	26%	Widow(er)	2%
Education (n=643)		Separated	2%
High School Graduate	12%	**Gender (n=643)**	
Vocational or trade school	11%	Male	40%
Some College	27%	Female	60%
College Graduate	29%	**Income (n=643)**	
Attended Graduate School	7%	\$30,000 - \$39,999	23%
Graduate Degree	13%	\$40,000 - \$49,999	15%
Employment Status (n=643)		\$50,000 - \$59,999	16%
Full-time	66%	\$60,000 - \$74,999	24%
Part-time	7%	\$75,000 - \$99,999	10%
Homemaker	5%	\$100,000 - \$124,999	8%
Student	1%	\$125,000 - \$149,999	1%
Retired	15%	**Adults in HH (n=643)**	
Unemployed	3%	Mean	1.9
Disabled	1%	**Children in HH (n=275)**	
Self employed	2%	Mean	1.6

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Consumer Market Profile

Demographics (cont.)

IHA Mass Market			
Age (n=643)		**Marital Status (n=643)**	
18 - 24	2%	Married	72%
25 - 34	15%	Divorced	10%
35 - 44	27%	Never married	9%
45 - 54	26%	Unmarried, living together	4%
55 +	29%	Widow(er)	4%
Education (n=643)		Separated	1%
High School Graduate	20%	**Gender (n=643)**	
Vocational or trade school	16%	Male	63%
Some College	26%	Female	37%
College Graduate	22%	**Income (n=643)**	
Attended Graduate School	5%	$30,000 - $39,999	26%
Graduate Degree	9%	$40,000 - $49,999	20%
Employment Status (n=643)		$50,000 - $59,999	18%
Full-time	49%	$60,000 - $74,999	21%
Part-time	11%	$75,000 - $99,999	12%
Homemaker	14%	$100,000 - $124,999	2%
Student	2%	$125,000 - $149,999	1%
Retired	15%	**Adults in HH (n=643)**	
Unemployed	3%	Mean	2.1
Disabled	3%	**Children in HH (n=275)**	
Self employed	3%	Mean	1.7

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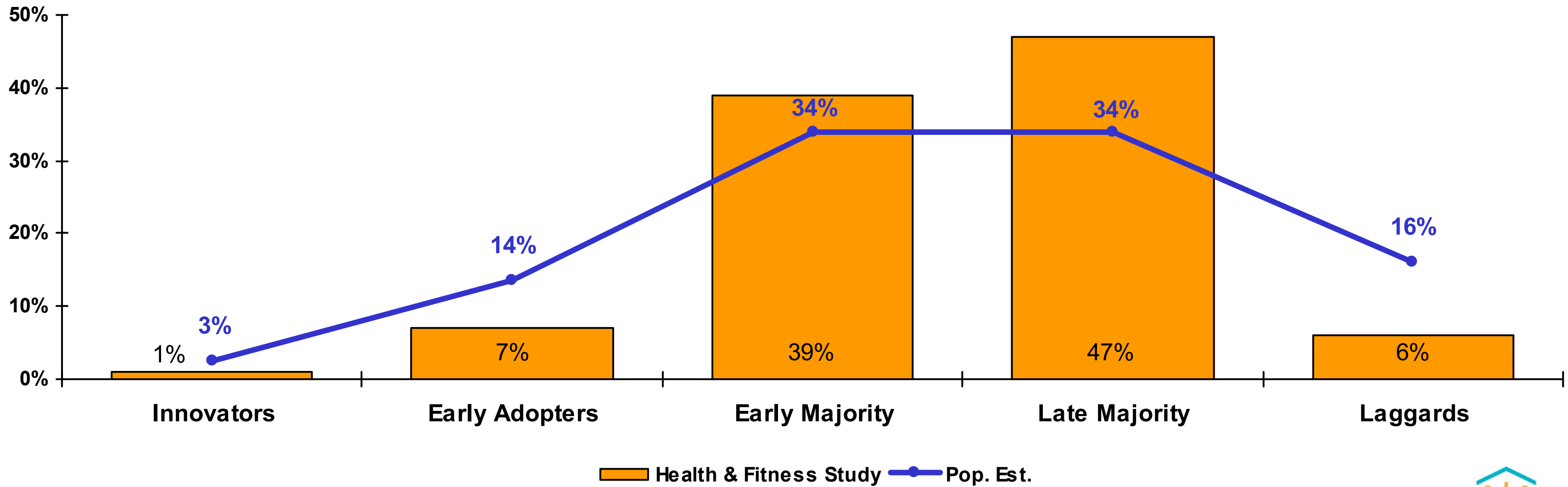
Consumer Market Profile

Likelihood to Adopt New Home Technology

- Respondents were asked to describe their tendency to adopt home technology. The results roughly conform to a normally-distributed bell curve. This distribution is not only in general accordance with the extant literature on the technology adoption life cycle, but is also consistent with results generated over past IHA studies. Although the distribution of the Late Majority and Laggards in this study varies somewhat from the population estimate, the totals are roughly the same (about half fall into these two categories).

- As noted by Geoffrey Moore in *Crossing the Chasm* (1991), the initial customer set for new technology products consists primarily of innovators and early adopters. The innovators or technology enthusiasts are the first to realize the potential in the new product, but the early adopters or visionaries dominate the buying decisions in the market.



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Key Findings

- General Health & Fitness Profile
- Weight Management
- Diet & Nutrition
- Stress, Energy & Emotional Balance
- Exercise & Fitness
- Chronic Health Conditions
- Home Health Technology Products
- Consumer Market Profile
  - Demographics
  - Technology Adoption Patterns
- Appendix

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Appendix

Product Descriptions

Smart Scale

- **The Smart Scale is an all-in-one Internet scale that also helps you manage your weight and health.**
- **Displays key measurements** on a large, color screen, including weight, change in weight, body fat and body mass index.
- **Multiple user profiles accommodated:** multiple user profiles can be set up using buttons on the scale, and each user can customize his or her profile "homepage."
- **Includes easy to use tools for goal setting and management of progress towards goals:** Calories eaten can be compared to calories burned from basic diet and exercise data you input, so you can adjust your behavior to manage your weight. Users can set weight, body fat and body mass index goals over time and the scale will graphically display the progress to those goals.
- **Secure Internet information access so your physician or personal trainer can provide input:** User profile and health information can be saved and remembered overtime, and displayed graphically. Each user's information can be uploaded to a secure Internet site to receive additional input, analysis and coaching from sources you choose, like your physician or personal trainer.
- **Three Variations:**
  - **<u>All-in-one Internet Smart Scale</u> with a large color screen**
  - **All-in-one Internet Smart Scale <u>with remote control</u> in addition to the large color screen.**
    - <u>Multiple user profiles can be set up using an easy-to-use remote control,</u> making programming easy
  - **All-in-one Internet Smart Scale with <u>wireless color touch-screen</u>.**
    - Key measurements displayed on a large, <u>color touch-screen that you can mount to the wall at eye level for easy viewing</u>.
    - <u>Multiple user profiles can be set up using easy pull-down menus</u>, making programming easy; each user can customize his or her profile "homepage."

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Appendix

Product Descriptions

Smart Scale with Wearable Body Monitor

- **Adds a wearable body monitor to the all-in-one Internet Smart Scale.**
- **The wearable body monitor uses sensors to measure your activity level, and displays your calories burned** as you go through your daily activities or workout. It wirelessly sends your information to the Smart Scale, to compare calories burned to calories eaten, so you can adjust your habits to manage your weight. A single body monitor can passed around among multiple users, or you may acquire individual monitors for each user.
- **The Smart Scale displays key measurements** on a large, color screen, including weight, change in weight, body fat and body mass index.
- **Multiple user profiles accommodated:** multiple user profiles can be set up using buttons on the scale, and each user can customize his or her profile “homepage.”
- **Includes easy to use tools for goal setting and management of progress towards goals:** Calories eaten can be compared to calories burned from basic diet and exercise data you input, so you can adjust your behavior to manage your weight. Users can set weight, body fat and body mass index goals over time and the scale will graphically display the progress to those goals.
- **Secure Internet information access so your physician or personal trainer can provide input:** User profile and health information can be saved and remembered over time, and displayed graphically. Each user’s information can be uploaded to a secure Internet site to receive additional input, analysis and coaching from sources you choose, like your physician or personal trainer.

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Appendix

Product Descriptions

Family Health Monitoring System

- **The Family Health Monitoring System concept is an integrated system that helps you track and manage your family's health.**
- Using a central display, family members' health profiles and information can be entered and uploaded to a secure Website for easy, private access.
- Through a wireless connection, health monitoring devices such as a blood pressure monitor, thermometer, or heart rate monitor can upload and store information automatically as measurements are taken.
- Family members' health, exercise and wellness profiles are updated and tracked. Through the secure personal Website, information, frequently asked questions, and links to trusted health sources are available for expert advice.
- As an option, family doctors and other health professionals (nutritionists, trainers) could also securely access the site and provide interactive services.

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Health and Fitness Needs Assessment Study

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