
Written for the American Council on Science and Health by Diane Woznicki, M.S., R.D.

Magazine articles evaluated by F. J. Francis, Ph.D.; Ruth Kava, Ph.D., R.D.; Manfred Kroger, Ph.D.; and Irene Berman-Levine, Ph.D., R.D.

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When they do a good job at reporting the facts, magazines can help consumers to adopt healthier eating practices. But misleading magazine reports can be counterproductive (“... what you eat can have a direct chemical effect on whether you’re happy, sad, irritable, moody, alert, calm or sleepy”) or misleading (“In many cases, diet alone could be the cause of—and thus the solution to—waning energy levels or plummeting moods”). Both of the foregoing quotes are from a popular women's magazine; such messages complicate learning and set consumers up for disappointment. Is it any wonder that an estimated 23 percent of consumers say they are confused by the nutrition reports they find in the media?

The American Council on Science and Health (ACSH) has been tracking magazine nutrition reporting for 15 years. Over that period ACSH has found that the accuracy of the reporting has improved, reflecting most magazines’ growing commitment to educating their readers. In this, the seventh Nutrition Accuracy in Popular Magazines survey, ACSH found the majority of magazines (15 out of 21, or 77%) to be EXCELLENT or GOOD sources of nutrition information. “These magazines are no longer looking at diet and foods frivolously, as they do ... clothing fads,” observed survey judge Manfred Kroger.

Six magazines, or 23 percent, were shown to be only FAIR or POOR sources of nutrition information, however, reflecting a continued need for improvement. Three of the lowest rated magazines were titles new to the survey.

The highest rated magazine in the current survey was Consumer Reports, which earned a rating of 95 percent. CR was joined by Better Homes and Gardens (92%) and Good Housekeeping (90%) as the survey’s only EXCELLENT (90–100%) sources of nutrition advice. GOOD (80–89%) sources included Glamour (89%), Parents (88%), Health (87%), Reader’s Digest (86%), Prevention (86%), Woman’s Day (85%), Cooking Light (85%), McCall’s (83%), Redbook (83%), Runner’s World (82%), Shape (81%), and Men’s Health (81%).

FAIR (70–79%) sources included Fitness (79%), Mademoiselle (79%), Self (77%), Cosmopolitan (74%), and Muscle & Fitness (70%).

Just one magazine, New Woman (69%), was found to be a POOR (less than 70% rating) source of nutrition information.

These results demonstrate the continued need for consumers to scrutinize the accuracy of the nutrition reporting they find in popular magazines. A recent survey of nutrition trends by the American Dietetic Association (ADA) indicated that consumers do have a healthy level of distrust for what they read; according to the ADA survey, only 39 percent of consumers trust health magazines and only 36 percent trust women’s magazines to dispense accurate information. (The ADA survey did not list by name the magazines studied.)

The ADA study also indicated that a growing number of consumers like to hear about new nutrition studies, but that confusion and frustration over the published reports interfere with their knowledge, their behavior, and their attitudes with respect to nutrition.

In ACSH’s survey most of the health magazines rated—Health, Prevention, Runner’s World, Shape, and Men’s Health—earned good marks. Two of the magazines in this category—Fitness and Muscle & Fitness—were found to be unreliable sources, however. The ratings given to women’s magazines in the ACSH survey ranged from GOOD to POOR; their overall score averaged out to FAIR.

While the ADA survey did not break “consumer” or “homemaking” magazines out into separate categories, some of the highest rated publications in the ACSH survey fell into either the consumer (Consumer Reports, Parents, Better Homes & Gardens) or homemaking (Good Housekeeping, Cooking Light) groups.

The ACSH Survey: Methodology and Rating Criteria

ACSH has now used the same methodology for three consecutive surveys: the present one, covering the publication years 1995–1996, and those covering the publication years 1992–1994 and 1990–1992. Results from the three surveys thus are directly comparable, allowing us to observe trends in the magazines’ ratings over the years.

For the present survey ACSH identified 21 top-circulating magazines that regularly featured nutrition news and that targeted different audiences. Regrettably, only one men’s
Table 1. Ranking of Evaluated Magazines

<table>
<thead>
<tr>
<th>Magazine (listed by target audience group)</th>
<th>Circulation* (in millions)</th>
<th>Previous ('92-'94 survey) Score (percentage)</th>
<th>Current Score (percentage)</th>
<th>Group Score (percentage)</th>
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</thead>
<tbody>
<tr>
<td><strong>Consumers</strong></td>
<td></td>
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<tr>
<td>Consumer Reports</td>
<td>4.5**</td>
<td>95</td>
<td>95</td>
<td></td>
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<tr>
<td>Parents</td>
<td>1.7</td>
<td>91</td>
<td>88</td>
<td>90</td>
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<tr>
<td>Reader's Digest</td>
<td>15.0</td>
<td>88</td>
<td>86</td>
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<tr>
<td><strong>Homemaking</strong></td>
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<td></td>
<td></td>
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<tr>
<td>Better Homes &amp; Gardens</td>
<td>7.6</td>
<td>91</td>
<td>92</td>
<td></td>
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<tr>
<td>Good Housekeeping</td>
<td>4.9</td>
<td>84</td>
<td>90</td>
<td>89</td>
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<tr>
<td>Cooking Light</td>
<td>1.4</td>
<td>89</td>
<td>85</td>
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<td><strong>Health</strong></td>
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<tr>
<td>Health</td>
<td>9.9</td>
<td>82</td>
<td>87</td>
<td></td>
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<tr>
<td>Prevention</td>
<td>3.3</td>
<td>87</td>
<td>86</td>
<td></td>
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<tr>
<td>Runner's World</td>
<td>0.4</td>
<td>74</td>
<td>82</td>
<td></td>
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<tr>
<td>Shape</td>
<td>0.9</td>
<td>N/A+</td>
<td>81</td>
<td>81</td>
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<tr>
<td>Men's Health</td>
<td>1.4</td>
<td>77</td>
<td>81</td>
<td></td>
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<tr>
<td>Fitness</td>
<td>0.8</td>
<td>N/A+</td>
<td>79</td>
<td></td>
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<tr>
<td>Muscle &amp; Fitness</td>
<td>0.5</td>
<td>N/A+</td>
<td>70</td>
<td></td>
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<tr>
<td><strong>Women's</strong></td>
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<tr>
<td>Glamour</td>
<td>2.1</td>
<td>88</td>
<td>89</td>
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<tr>
<td>Woman's Day</td>
<td>4.3</td>
<td>86</td>
<td>85</td>
<td></td>
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<tr>
<td>McCall's</td>
<td>4.3</td>
<td>84</td>
<td>83</td>
<td></td>
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<tr>
<td>Redbook</td>
<td>2.9</td>
<td>84</td>
<td>83</td>
<td>80</td>
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<tr>
<td>Mademoiselle</td>
<td>1.2</td>
<td>88</td>
<td>79</td>
<td></td>
</tr>
<tr>
<td>Self</td>
<td>1.2</td>
<td>87</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>Cosmopolitan</td>
<td>2.5</td>
<td>69</td>
<td>74</td>
<td></td>
</tr>
<tr>
<td>New Woman</td>
<td>1.2</td>
<td>77</td>
<td>69</td>
<td></td>
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* From Advertising Age
** From Consumer's Union
+ Not applicable; magazine not evaluated in previous surveys.
magazine and no “ethnically diverse” magazine published enough nutrition articles to be included in this survey (we required at least eight articles in the two-year survey period). We had hoped this time to look more closely at nutrition reporting targeted at men and at specific ethnic groups.

We dropped American Health from this survey because the magazine changed both its format and its editorial policy midway through our study period; we felt it would not have been fair to include articles from both periods. We dropped Vogue because it no longer met the criteria for inclusion. We included three publications for the first time: Fitness, Muscle & Fitness, and Shape. All three magazines published a notable number of nutrition articles.

To start, we identified all nutrition articles of at least one-half page in length in issues of survey magazines published between January 1995 and December 1996, inclusive. We then selected eight articles from the full two-year run of each magazine using a random number generator. The purpose of random selection was to prevent any possibility of bias in choosing articles. We electronically scanned the articles from each magazine and reformatted them to eliminate such identifying features as magazine titles and author names; this was done to allow the judges to focus on content alone and to prevent their being swayed by an author’s credentials or a magazine’s reputation. (Consumer Reports remained recognizable to the judges because of its unique product comparison tables.)

Four experts in food science and nutrition served as ACSH’s judges. All four independently evaluated each of the 168 articles for its accuracy, for its presentation style, and for the validity of its recommendations.

The judges rated each article by assigning points on a five-point scale to each of eight statements. A maximum score—five points—corresponded to a response of “strongly agree.” Fewer points were awarded for responses of “somewhat agree” and so on down, to a low score of one point for “strongly disagree.” Each article thus received a set of four scores ranging from one to five points on each of the eight statements, for a total score from each judge of from eight to forty points overall.

The article scores for each magazine and from each judge were added together to derive a cumulative score for each magazine, with the highest possible score being 320 points, or 100 percent from each judge. Dr. Jerome Lee, the survey statistician, then tabulated the results to determine each magazine’s ranking.

The Results in Brief—and What the Ratings Mean

The judges ranked most of the 21 publications studied in the present survey in the two highest categories: Three of the magazines were ranked EXCELLENT (90–100%), and 12 were judged GOOD (80–89%). Six of the magazines earned spots in the lower two categories: Five were ranked FAIR (70–79%) and one, POOR (less than 70%) (see Table 1). Individual judges’ scores were not statistically different from one other, indicating consistency in their ratings of the surveyed articles’ quality.

EXCELLENT and GOOD magazines contained the greatest number of accurate articles the majority of the time. Readers of these publications are likely to find sound information on nutrition—information that is well presented and that comes with valid recommendations. EXCELLENT magazines are likely to be accurate more often than those rated GOOD, but GOOD magazines still provide a lot of solid information.

A FAIR or POOR rating indicates an increasing proportion of unreliable content. Publications ranked FAIR or POOR ran as some portion of their articles pieces that scored poorly across the board in all three of the rating categories (accuracy, presentation, and recommendations). Thus, as the ratings fall, so does the probability that the content of a FAIR or POOR magazine’s nutrition articles will be sound.

In the detailed descriptions of the surveyed magazines’ ratings that follow, we note those instances in which a magazine’s score in the current survey is statistically different from its scores in previous surveys. When a difference is labeled “statistically significant,” it indicates that the change in score is unlikely to have occurred simply by chance—i.e., the difference very likely reflects a real difference in the quality of that magazine’s articles. If the difference in a magazine’s scores is not statistically significant, that does not necessarily indicate that the difference in the articles is not real; it means, however, that we cannot assume with the same degree of confidence that the difference exists.
ACSH recommends that readers of this survey use these ratings to determine which groups of magazines typically present better or worse information—not to state flatly that “the information in magazine A, with its score of 88, is always more accurate than that in magazine B, with its score of 84.”

Magazines Rated EXCELLENT (100%–90%)

Consumer Reports (95%) was the highest ranked magazine for the second consecutive survey. The March ‘96 article “Iron in the Diet: Do You Need Supplements?” corrected common misconceptions and supplied solid dietary advice. In “Will a Pill Take Your Pounds Off?” (Aug. ‘96), consumers were cautioned not to look upon dexfenfluramine—the first weight-loss drug approved by The Food and Drug Administration (FDA) in two decades—as a quick fix for obesity, despite the clamor surrounding it. Cleverly, CR’s editors used the introduction of this new drug as a platform to promote exercise and sensible eating. Overall, the hallmarks of Consumer Reports’ nutrition coverage are thorough research, balanced reporting, and scientifically sound advice.

Better Homes & Gardens (92%) also retained its EXCELLENT ranking. “Scaling the Vegetarian Pyramid” (June ‘96) dispelled the most widespread myth in vegetarianism: that vegetarians need to combine two plant foods to simulate a meat protein at every meal. The article pointed out that eating a variety of foods and enough calories assures protein adequacy even as it also reminded us that a plant-based diet is linked to lower incidence of heart disease, the number-one killer of men and women nationwide. Another article, “Vitamins: Out of the Bottle?” (Aug. ‘96), explained that two thirds of us take vitamin supplements and encouraged readers to rely on foods, not pills, both to meet Recommended Dietary Allowances (RDAs) and to obtain possibly health-promoting food chemicals such as phytoestrogens. The judges thought the article’s suggestion that women of childbearing age take self-prescribed calcium and iron supplements was unsubstantiated, however.

Good Housekeeping’s EXCELLENT score of 90 percent was up from 84 percent (GOOD) in the last survey. According to survey statistician Lee, this improvement approached statistical significance. He added that such a rise is impressive: “Had we evaluated more than eight articles, Good Housekeeping’s improvement probably would have proven to be statistically better than its former rating.” One of the GH articles surveyed, “7 Habits of Successful Dieters” (Oct. ’95), gave realistic, scientifically sound recommendations to lose no more than one pound per week and to address stress by noncaloric means. Good Housekeeping articles that addressed controversies, such as “E The Super Vitamin?” (Aug. ’96), discouraged quick-fix approaches to making sometimes arduous dietary changes and stated that the slow approach was best. In “Eat Your Way to a Good Mood” (March ’96), however, women were advised to eat pure carbohydrate, high-selenium, or high-calcium meals to stave off depression; but sufficient validation—based on consensus rather than on single studies or the opinions of a single scientist—was missing. This article did manage to salvage points by wisely advocating food, not supplements, to meet RDAs.

One reason why Good Housekeeping, always a GOOD source for nutrition information in the past, ascended into the highest category was that during this survey period, according to GH Director of Nutrition Delia Hammock, R.D., “We changed editors. The new editor’s aims and goals were to get more nutrition into the magazine.” This meant longer, more comprehensive nutrition articles that thoroughly spelled out their sometimes complex information. Also, in previous years the diet-book excerpts published in GH may not have been subjected to the scrupulous editing of a nutrition expert; the articles covered in the current survey did undergo such scrutiny prior to publication, Hammock said.

Magazines Rated GOOD (89–80%)

Glamour (89%) maintained its score at the high end of the GOOD category. “Cheese? Yes!” (May ’95) promoted taste-tested reduced-fat cheeses that are reliable sources of calcium, particularly for non–milk drinkers. In many cases, women who regularly achieve the calcium RDA can prevent osteoporosis; this article provided Glamour’s readers with tools with which to accomplish that. On the other hand, a December ’96 article, “How Can You Tell When You’re Hungry,” assumed that all peo-
people's physiological and psychological hunger symptoms should be handled in the same way. The judges disagreed with the article's assertion that "...if you feel full, but not quite satisfied ... it could be a sign that your meal was unbalanced."

Parents magazine's GOOD score of 88 percent represented a slight drop from its EXCELLENT (91%) rating in the last survey, but this very small drop suggests no great change in the quality of the magazine's nutrition reporting. "It's score change was statistically no different from its previous score," according to survey statistician Lee. In the current survey Parents was consistently well rated for its clear explanations of crucial nutrition issues. "Eating for Two" (April '95) advised readers to adapt nutrient-dense, balanced diets to reduce low birth-weight risk and went on to admonish them not to self-prescribe supplements—an important warning on vitamin A and birth defects. A March '95 article, "The Complete Guide to Picky Eaters," addressed the question of how parents can successfully walk the line between shaping children's nutrition habits and allowing children to self-regulate their own appetites. Another piece, "Double-Trouble Diet" (Jan. '96), was a whimsical take on the ever-popular topic of weight loss, but the judges felt the article promoted unhealthy negative body-image messages and the sort of rigid dieting practices that are usually doomed to failure.

Health retained its GOOD rating (87%) for the second consecutive survey; the magazine's present score is statistically the same as its former (82%) rating. Objective reporting was evident in Health on the whole. A well regarded September '95 article, "Milk's Hot Again," capitalized on the coffee latte craze to inform readers that osteoporosis is a men's as well as a women's disease. What prevented Health from gaining a higher overall score were such articles as "Should You Get a Vitamin Checkup?" (Jan./Feb. '96), which lost objectivity while presenting the pros and cons of blood testing for antioxidants. Each statement made in the article by a reputable scientist was overshadowed by the testimony of laboratory directors who were promoting vitamin testing. But blood vitamin levels can be as variable as a daily diet; the ACSH judges therefore considered the implication that Health's readers should consider getting tested for such substances as beta-carotene impractical.

ACSH asked vitamin A researcher John Edgar Smith, Ph.D., an associate professor of nutrition at The Pennsylvania State University, about blood tests for antioxidants. "Beta-carotene level is not a valid indicator of disease risk," said Smith. Furthermore, regarding the Health article's anecdotal accounts of people who lowered their disease risk using vitamin pills, Smith noted that "People who eat foods rich in antioxidants have a lower incidence of cancer than people who consider vegetables to be the lettuce on their Big Macs." He emphasized—as, perhaps, Health should have—that diet, not pills, is important in disease prevention.

Reader's Digest (86%) also remained in the GOOD category, where it has been for the past three surveys. One RD article reviewed, "Ten Ways to Lose Ten Pounds" (July '96), recommended making reasonable changes to burn body fat slowly and also advocated avoiding meal skipping, exercising to raise metabolism, and eating slowly to allow satiety signals to have an effect. In "Foods that Boost Your Moods" (Feb. '96), however, conclusions drawn about the food-behavior connection were theoretical. The article stated that "Stress hormones... drain magnesium from cells, resulting in lower resistance to colds and viruses and a tired feeling." The article went on to advise readers to eat high-magnesium foods to reduce anxiety, but such advice is unproved even though most people don't meet the magnesium RDA.

Prevention's score of 86 percent also kept it in the GOOD category for the third consecutive survey. The article "Shrink Your Stomach" (July '96) explained that dieting shrinks stomach capacity and may therefore have a role in weight loss. The piece underscored that meal skipping and deprivation are counterproductive to weight reduction, however, and wisely advocated a regimen of small meals throughout the day to curb appetite and a limiting of high-fat foods. The article presented new research flawlessly. Another article, "Seeds of Hope" (Feb. '96), reported that lupus symptoms improved with flax seed ingestion. Despite the article's disclaimer that that information was preliminary, the ACSH judges felt that that inference may have led some readers to make lifestyle changes, and the judges would have liked to
have seen consensus recommendations for lupus sufferers instead.

Woman’s Day stayed in the GOOD category for the third consecutive survey with a score of 85 percent. The flawless “How Not to Gain Weight Over the Holidays” (Nov. 19, 1996) reminded readers that the average weight gain between Thanksgiving and New Year’s Day is seven pounds and provided opinions from experts on how to eat sensibly. “Blast Your Fat Habits” (June 25, 1996) contained such common-sense advice as, “Never go shopping when you’re hungry... [you are] likely to buy more than you need” but neglected to give the theory expert backup. The Woman’s Day article “I’d Kill for a Candy Bar” (June 6, 1995) also failed to document its sources for such statements as, “In one study of yo-yo dieters who craved fatty foods, subjects who exercised moderately substantially reduced their cravings.” The assertion in the same piece that “Researchers think that back in our cave woman days, when food was scarce and fat was key to survival, we developed a strong preference for high-fat food” left judges hungry for the source of the information. In short, Woman’s Day could improve its already GOOD standing markedly if its articles provided full citations when referring to studies.

Cooking Light—once the highest rated publication in the survey with a 91-percent EXCELLENT score—received a GOOD score (85%) in the current survey. That rating was not statistically different from Cooking Light’s score in the last (1992–1994) survey, when it was also rated GOOD (89%). Cooking Light got high marks for “Cholesterol’s Acquittal” (Oct. ’95). The article gained points for presenting saturated fat as more of a culprit than cholesterol in causing heart disease. The well-written piece described how the level of “bad” cholesterol—low-density lipoprotein—increases in response to eating saturated fat. In the article nutrition experts and spokespersons for major health organizations debunked the idea that foods such as eggs are inherently unhealthy and advised eating lean proteins and cutting back on hydrogenated fats. Conversely, according to ACSH judge Henry Kroger, another Cooking Light article, “Rants and Craves” (June ’96), was full of conjecture about neurotransmitters’ role in our eating patterns. It seemed to Kroger that the author’s faulty interpretation of the research was interwoven with the quotations of experts. For example, one quoted expert stated that protein is necessary at breakfast and lunch. The Cooking Light author inserted the assertion that “protein makes your brain sharp.” And other statements directly attributed to experts were inaccurate—“Cravings are the result of our brain crying out for a particular food,” for example. (Science still has no clear explanation of why food cravings happen and does not know whether satisfying them meets a certain nutrient deficiency.)

Throughout the history of the ACSH survey, both McCall’s (83%) and Redbook (83%) have consistently earned GOOD scores. One current McCall’s piece, “The Dangers of Dieting” (April ’96), discouraged rigid calorie-cutting, which can lead to frequent illness, fatigue, anxiety, depression, hair loss, and dietary imbalances. The article was flawless except for a statement that initial weight loss reflects muscle loss (water and glycogen loss happen first). The studies discussed in the article were translated accurately and clearly into lay language. But ACSH judges disputed the claim made in another McCall’s piece, “Maximize Your Veggies’ Cancer-Fighting Power” (Nov. ’95), that “carotenoids prevent lung cancer.” The statement was not documented, and carotenoids have not been proved to prevent lung cancer. In fact, according to ACSH advisor Victor Herbert, M.D., the most convincing study done to date has shown that beta-carotene supplements slightly increased cancer risk. Additionally, the “Veggies” article suffered from the “studies show” syndrome: It used the phrase “according to studies” instead of giving the name of an actual study, author, or research institution.

Redbook’s high-scoring “I Won’t Eat That” (March ’95) discussed kids’ eating behaviors through various developmental stages. Why children may narrow their food choices—to only white foods such as cheese, yogurt, and peeled apples, for instance—was rightly chalked up to the unexplainable, since experts don’t know what causes such food jags. The article discouraged placing overweight kids on diets and instead encouraged physical activity; it also presented snacks as essential vehicles for calories and nutrients during childhood. On the other hand, Redbook’s “How the Diet Experts Eat” (July ’95) lost the magazine some points. Such
unproved techniques to ward off binging as eating a combination of starch plus sugar—but not starch or sugar alone—to boost energy levels may have worked for the nutrition expert quoted; but the concepts were theoretical and therefore could not be extrapolated to the public at large.

"The Best Anti-Cancer Diet" (May '95) imparted pioneering information on a very complex subject to Redbook's readers; but according to judge Manfred Kroger the piece contained too many "iffy" items on which to base recommendations. For example, the article cited an oncologic physician and a Canadian study to support the contention that "Fiber may safeguard against ovarian, breast, and uterine cancer by binding estrogen in the intestines." Although evidence that a high-fiber diet is cancer preventive is compelling, information about fiber's impact on specific cancers is best presented as preliminary at this point.

Runner's World saw its score rise to GOOD (82%) from its previous spot in the FAIR category. The numerical difference was not statistically significant, however: According to statistician Lee, based on only eight articles, "An 82 percent in this survey is statistically no different than a 74 percent in the last survey." One Runner's World article, "Bottoms Up? The Benefits and Drawbacks of Alcoholic Beverages" (May '95), described the interference of alcohol in carbohydrate metabolism, a problem for athletes.

A November '96 Runner's World "Protein Primer" accurately explained protein metabolism in exercise; but when discussing the subject of requirements, the author relied on personal opinion rather than the study citations that would have supplied a greater degree of objectivity. The article's contention that runners underconsume protein, for example, seemed to be the author's own opinion, as no sources were cited. The author did attempt to address runners' increased protein requirements by citing different data; but in one instance the article gave protein requirements per kilogram of body weight; in another it gave protein requirements per pound of body weight. This comparison of apples and oranges was confusing, especially when the author went on to state that a 30 percent protein diet posed (in the author's opinion) no health risk.

An article in the May '96 Runner's World, "Phyting Phoods," promoted phytochemicals—including indoles in cabbage, capsaicin in hot peppers, and monoterpenes in lemons and limes—as purported anticancer properties. Study citations were scarce, and links between the chemicals and disease processes were presented as fact, when they are actually still under investigation. Runner's World could aspire to a higher position in the GOOD category if its editors would stop to double check for accuracy before press time.

According to "Why Diets are Doomed" in the February '95 issue of Shape—a GOOD-rated (81%) survey newcomer—35 percent of women are obese in the '90s, up from 26 percent in the '70s. This article was uniformly applauded by ACSH's judges and, in fact, typified how magazines can play a role in bridging the gap between readers' knowledge and their adoption of lifestyle changes. Shape's author interviewed obesity research experts and funneled their statements into practical behavior-modification and goal-setting techniques. Rationales for the experts' recommendations were expertly cited.

On the other hand, a Shape article called "Trans Action" (Jan. '96) attempted to totally eliminate deep-fried fast foods and products containing partially hydrogenated vegetable oil from people's diets. The article recommended whipping a stick of butter together with a half cup of canola oil to make a trans-fatty-acid-free spread. But asking consumers to avoid certain foods contradicts the message of the U.S. Department of Agriculture's Food Guide Pyramid. Furthermore, the article's advice on how to make a more healthful butter was impractical: Any health benefit to be gained by eating a reduced trans-fat spread might be negated by the spread's saturated-fat content. We don't even know whether eating such a spread would be more healthful, because the trans-fat contents of foods are not yet readily available in the food-composition tables used by nutrition professionals.

Men's Health, previously rated FAIR (77%), squeaked into GOOD standing in the current survey (81%). One cleverly titled article, "Be a Regular Guy" (June '96), stated that most men eat only half the recommended 25 grams of fiber they should be consuming daily. "When you pop one of Idaho's finest into the microwave, think 'jacket required,'" said the
article, encouraging readers to consume potato skins. Other fiber sources mentioned were the liquid in a can of beans, bread with the word “whole” on the label (the word “wheat” alone could indicate white bread colored brown with dye), and a scoop of bran cereal mixed into a nonbran favorite. Interestingly written, the article quoted experts who provided personal tips to improve fiber consumption.

On the other hand, “The Prescription Diet” (May ’96) claimed that chicken noodle soup is the answer to the nation’s obesity problem because it is high in fiber—which may or may not be true, depending on the ingredients used—and because it is high in water, which dissolves fat—which is untrue. To single out a particular food as either bad or, as in this case, good is a red flag for searchers after junk science (see “ACSH’s Advice to Magazines and Consumers,” page 10). Water is involved in breaking down all nutrients in the body, but to assert that water speeds fat breakdown is ridiculous. One of the article’s other claims—that “Ham is packed with protein, which delivers alertness-boosting chemicals to the brain”—is also untrue.

The author of “The Prescription Diet” seemed to pluck facts out of their scientific context to have them fit the agenda of the article. The article stated, for example, that skipping meals caused ketosis. And the author’s advice? “Almost any food can be your miracle cure [for the bad breath caused by ketones], but . . . try gnoshing (sic) on a salad.” In fact, it would take more than skipping a meal to cause ketosis in a well-nourished individual. Men’s Health would be well advised to choose writers with a scientific background and then put all its articles through a rigorous editing process before publication.

Magazines Rated Fair (70 – 79%)

Fitness, one of the titles new to the survey, received a rating of 79 percent. One Fitness article, “The Great American Fat Obsession” (Oct. ’96), described common myths about dietary and body fat. The piece set the record straight on chromium picolinate, ephedra, and other dubious fat-burning agents and advised readers to take up aerobic exercise to burn fat. On the whole, however, highly rated Fitness articles were hard to come by. The tantalizing title “Eat Your Way Out of the Dumps” (Jan./Feb. ’96) incorrectly implied that food is a cure-all. Here’s a sample:

Goal: Beating the blues. What to eat: Food rich in B6, B12, folic acid and moderate amounts of caffeine.

Why: These B vitamins are believed to synthesize brain chemicals—very low levels of which have been linked with depression. Caffeine is a mild antidepressant.

But vitamins don’t synthesize anything. Enzymes synthesize—often with the help of vitamins. And expert backup for the article’s claim about vitamins’ role in brain chemistry was noticeably absent, detracting from the credibility of the claim.

The scores of Mademoiselle (79%) and Self (77%) have zigzagged from FAIR to GOOD to FAIR in earlier surveys. Mademoiselle’s downward slide to FAIR from its GOOD (88%) in the last survey reflects a statistically significant decrease in the accuracy of its reporting, according to statistician Lee. Self’s present score is not statistically worse than its previous (87%) rating, however.

The highest rated Mademoiselle article in the current survey was “Is Sugar Poison?” (Dec. ’95). The article noted that Americans eat 193 pounds of sugar per person per year and then went on to refute the belief that many common maladies—heart disease, hyperactivity, diabetes, acne—are associated with sugar. The presence in the piece of some technical errors (such as referring to sugar as a “super concentrated source of calories”) chipped away at its points. (Butter, margarine, or any pure-fat food is actually much more of a super concentrated calorie source, gram for gram, than sugar.)

“Hungry Isn’t Sexy, Eating Right Is” (May ’96) presupposed that all people need to consume 1,300 calories per day to lose weight; but, as ACSH judge Berman-Levine pointed out, “calorie needs vary tremendously between individuals, and articles need to reflect that.” Also, belying the article’s title, the author of the piece recommended only 3 to 3 1/2 ounces of meat or a meat alternate daily. But the 1995 Dietary Guidelines for Americans recommend two to three daily servings—each of 2 1/2 to 3 ounces—of these foods. Finally, no expert was cited as a reference for the article’s diet.
Self’s “Meals that Heal” (Jan. ’96) contained calorie-specific sample menus that were realistic models of the Food Guide Pyramid’s recommendation to use grains, fruits, and vegetables, rather than meat, as a base for meals. The article earned very few points overall, however, because it featured exaggerated assumptions based on Ayurvedic medicine and explained hunger and satiety patterns on the basis of doshas, or body-mind types. The article’s dosha-type-based recommendations of what to eat were both illogical and impractical: The person with an angry dosha, for example, should cool his temper with milk, butter, sweet fruits, and green vegetables to restore homeostasis, and should avoid hot, sour, and salty foods such as garlic and sour cream.

Another Self article, “Hidden Sugar” (Feb. ’95), struggled to distinguish between complex carbohydrate and sugar. The piece singled out certain high-sugar foods as “bad for you” because they “severely disrupt carbohydrate metabolism and lead to diabetes.” (Both the theory that certain foods are “bad” for you and the diabetes claim are baseless.) The article continued with a warning: “Eat too much sugar and you’ll find yourself on an emotional roller coaster, with bursts of energy followed by stretches of lethargy as your insulin level rises and falls”—which advice illustrates only that the author giving it was not versed in science. Simply put, Self readers should take the magazine’s advice with a grain of salt.

In this survey, for the first time, Cosmopolitan’s score rose to FAIR (74%) from POOR; and this higher score reflects a significant improvement in the way Cosmo has presented nutrition in the past two years. Cosmo’s food editor did not return our calls to comment on changes at the magazine, but ACSH noticed that the formerly point-losing “Dieter’s Notebook” column was noticeably absent from the survey’s randomly included articles.

The article “Keeping Our Bones Beautiful” (June ’95) provided good general advice on osteoporosis prevention. The article stated that “Around age 35, after peak bone mass is reached, women begin to lose bone at a rate of approximately 1 percent per year.” That cosmo is cosmetic in its approach to nutrition, continually tying science into beauty, was evident in the piece, however. The article’s contention that premature graying of hair is necessarily connected with early osteoporosis was based on a single report, and its assertion that phosphates are found only in colas is certainly not true.

“Lose 7 Pounds in 10 Days” (Sept. ’96) fed Cosmo’s readers the concept that quick weight loss burns fat—which it does not. A quick loss usually represents a loss of glycogen, water, and perhaps muscle. According to ACSH judge Ruth Kava, the article’s meal plans ignored the vegetable food group; and the piece’s theory that superhydration (“drinking at least five quarts of ice cold water per day”) speeds fat loss was unsubstantiated.

To sum up, the newly FAIR Cosmopolitan has done its readers a service by getting rid of “Dieter’s Notebook,” but the magazine still has much room for improvement.

In its first survey appearance Muscle & Fitness received a FAIR (70%) rating; only one of the eight M & F articles included for evaluation—a December ’96 piece called “Zone or Twilight Zone”—fared well with the judges. This well-regarded piece, a scientific critique of a sports book entitled Enter the Zone, was written by an author with obvious expertise in exercise physiology whose command of the scientific literature was refreshingly accurate. The article labeled “the zone” (described as a metabolic state of nirvana to which athletes could aspire with the help of the book) a gimmick. The piece also earned high marks by refuting incorrect advice to eat more fat and less carbohydrate to burn body fat. On the other hand, said ACSH Judge Irene Berman-Levine, it would be impossible for a January ’95 M & F article called “Joe Weider’s Waist-Flattening Diet” to flatten a stomach in three days, because starvation doesn’t selectively burn abdominal fat.

M & F’s “Should You Supplement Your Training?” (May ‘95) based its endorsement of protein supplements on an unpublished “study done by sports scientists” that was funded by the supplement maker. “Based on . . . [this] research . . . if you use supplementation with your weight training, you should expect increases in your biceps, forearm, chest and thigh,” said the article. But according to Understanding Nutrition, a respected text used by college and university nutrition professors, such high-protein diets affect muscle mass very little. The textbook states that the human body can make no more than one ounce of new body
protein per day in response to exercise—not in response to increased protein intake. Extra protein is excreted and/or accumulated as body fat, because the body has no storage site for excess protein. Furthermore, according to the text, athletes normally exceed their protein requirements simply by eating food, thus making protein supplements unnecessary and even potentially unhealthy.

One Magazine Rated Poor
(Below 70%)

New Woman was the only magazine to receive a POOR (69%) rating. “Thin for Life” (the name of a March ’95 article) is an appealing notion, but, said judge Berman-Levine of that misleading title, “Thin connotes an image that many people can never genetically attain.” The article was anecdotal and based on one behaviorist’s observations; therefore none of its information—such as a statement that the average food craving lasts four to six minutes—could be extrapolated to readers at large. Even if the author of the piece was, indeed, an expert in eating behaviors (something the judges couldn’t have known, as all authors’ names were omitted), scientific documentation is necessary when potentially thousands of readers can be affected by what’s being promoted in an article.

Worse yet was “Are You a Carbo Junkie?” (Aug. ’95), a New Woman piece that quoted self-proclaimed experts in nutrition who falsely asserted that we eat too much carbohydrate. In reality most of us eat far less than the 58 percent or more of calories that real experts recommend we get from carbohydrate. The article went on to call carbohydrate an insulin-raising culprit that harms the obese. Furthermore, when the piece gave a true obesity research expert, George Blackburn, M.D., a chance to try to salvage carbohydrate’s reputation, it followed up by trotting out another self-proclaimed expert to counter him. The article described incorrect use of a clinical tool called the glycemic index; made statements opposing The Food Guide Pyramid (“avoid sugar and chemicalized salad dressings”), and advised readers to eat one-third lean protein with two-thirds low-glycemic carbohydrate—all pointers that were unfounded, impractical, or both. In short, New Woman needs a nutritional makeover from head to toe.

How the Magazines Stacked Up by Target Audience

Our statistical analysis of the articles surveyed indicated that, on the whole, “consumer” magazines (Consumer Reports, Parents, and Reader’s Digest) and “homemaking” magazines (Better Homes & Gardens, Cooking Light, and Good Housekeeping) ran nutrition pieces that were significantly more accurate than those that ran in “health” magazines (Health, Men’s Health, Fitness, Muscle & Fitness, Prevention, and Runner’s World) and women’s magazines (Cosmopolitan, Glamour, Mademoiselle, McCall’s, New Woman, Redbook, Self, Shape, and Woman’s Day). (See Table 2 for a summary of general comments based on judges’ reactions to each magazine.)

The Judges’ Conclusions—and ACSH’s Advice to Magazines and Consumers

According to the judges, the magazines studied this time were, on the whole, refreshingly accurate in their nutrition coverage. “I was surprised at the caliber of the articles,” said three-time ACSH judge F. J. Francis. “A few [magazines] acted as if they had free rein to write anything, but even the poor ones managed to accrue some points.”

According to the ACSH judges and the Food and Nutrition Science Alliance’s “10 Flags of Junk Science” checklist, articles in well-rated magazines exhibited the following features:

- They encouraged good dietary practices and discouraged unhealthy ones, and they resisted labeling foods as good or bad.

- They made recommendations based on scientific consensus, and they avoided making major lifestyle recommendations based on preliminary studies, single studies, or the advice of a single expert citing his or her personal experience.

- They offered practical solutions—and avoided quick-fix solutions.

- They made scientifically sound recommendations and avoided making recommendations based on speculative, preliminary, or unproved findings.

Special Report

<table>
<thead>
<tr>
<th>Magazine (listed by target audience group)</th>
<th>Comments</th>
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<tbody>
<tr>
<td><strong>Consumer</strong></td>
<td></td>
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<tr>
<td><em>Consumer Reports</em></td>
<td>Objective, reliable, and scientifically sound.</td>
</tr>
<tr>
<td><em>Parents</em></td>
<td>Conscientious, expert advice and thorough explanations.</td>
</tr>
<tr>
<td><em>Reader’s Digest</em></td>
<td>Despite come-on titles (“Foods that Renew Your Energy”; “Foods that Boost Your Mood”; “Calcium: That ‘Miracle’ Mineral”) information is sensible.</td>
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<tr>
<td><strong>Homemaking</strong></td>
<td></td>
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<tr>
<td><em>Better Homes &amp; Gardens</em></td>
<td>Scientific recommendations are explained and demonstrated with food tips and recipes.</td>
</tr>
<tr>
<td><em>Good Housekeeping</em></td>
<td>Smoothly translates complex information into lay language.</td>
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<tr>
<td><em>Cooking Light</em></td>
<td>Seems to have the expertise to handle even the toughest topics, but brevity minor errors.</td>
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<tr>
<td><strong>Health</strong></td>
<td></td>
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<tr>
<td><em>Health</em></td>
<td>Strives to present both sides of controversies.</td>
</tr>
<tr>
<td><em>Prevention</em></td>
<td>Objective reporting, but readers could be led to change dietary habits based on preliminary research data.</td>
</tr>
<tr>
<td><em>Runner’s World</em></td>
<td>Recommendations to readers usually don’t adhere to scientific consensus.</td>
</tr>
<tr>
<td><em>Shape</em></td>
<td>Articles vary widely in accuracy.</td>
</tr>
<tr>
<td><em>Men’s Health</em></td>
<td>Uses nutrition for cover-story appeal versus serious educational purposes.</td>
</tr>
<tr>
<td><em>Fitness</em></td>
<td>Would benefit from scientific editorship to weed out “too-good-to-be-true”-sounding subject matter.</td>
</tr>
<tr>
<td><em>Muscle &amp; Fitness</em></td>
<td>Nutrition reporting at its worst. Most advice completely unreliable.</td>
</tr>
<tr>
<td><strong>Women’s</strong></td>
<td></td>
</tr>
<tr>
<td><em>Glamour</em></td>
<td>Concise, innovative, educational articles and food ideas.</td>
</tr>
<tr>
<td><em>McCall’s</em></td>
<td>Sound advice mostly aimed at weight reduction; suffers from “studies show” syndrome where sources are missing.</td>
</tr>
<tr>
<td><em>Redbook</em></td>
<td>Heavy reliance on renowned diet experts. Should always document sources of preliminary nutrition findings.</td>
</tr>
<tr>
<td><em>Mademoiselle</em></td>
<td>Accuracy has dropped. Fad diets and frivolous treatment of nutrition abound.</td>
</tr>
<tr>
<td><em>Self</em></td>
<td>Inconsistent or downright inaccurate presentation style and recommendations.</td>
</tr>
<tr>
<td><em>Cosmopolitan</em></td>
<td>Significantly better rating without “Dieter’s Notebook” columns. Up from POOR for the first time in survey history, but still not a trustworthy source.</td>
</tr>
<tr>
<td><em>New Woman</em></td>
<td>Struggles to present anything on nutrition. Needs a nutritional makeover from top to bottom.</td>
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</tbody>
</table>
• They cited qualified experts who had recognized credentials—and they avoided relying on self-proclaimed "experts" whose expertise might have stemmed from having written a best-selling diet book or from an affiliation with a health institute of possibly dubious credibility.

• They were interesting and well written, with content that flowed logically; their authors did not appear to be struggling to patch facts together to make a claim sound believable.

• They used accepted diet guidelines, including the USDA's Food Guide Pyramid, the Recommended Daily Allowances, and the principles of the Dietary Guidelines for Americans; they avoided making the sort of sweeping, dramatic claims that are refuted by major health organizations.

• They made recommendations based on studies published in peer-reviewed journals or studies associated with recognized professional organizations (e.g., The American Journal of Clinical Nutrition, The Journal of the American Medical Association, The New England Journal of Medicine, The Journal of Nutrition Education, Nutrition Reviews, and Nutrition Today); they avoided making recommendations designed to help sell a product.

• They interpreted scientific literature correctly, in its intended context, by following the conclusions of the researchers.

• They avoided making claims that sounded too good to be true.

ACSH advises consumers to validate claims before adopting any new dietary practices. Nutrition facts can be validated by consulting any of a number of textbooks available at college bookstores and libraries. In contrast to many best-selling nutrition books, textbooks designed for classroom use are among the most accurate sources of nutrition to be found anywhere. Consumers can check non-textbook nutrition books for accuracy by using the above checklist or a similar checklist that can be found online at http://www.quackwatch.com. The online checklist, which was developed by ACSH advisor Stephen Barrett, M.D., will aid consumers in screening out unreliable nutrition information.

Consumers can also contact credible professionals—such as scientists at accredited universities, cooperative-extension agents affiliated with state land-grant institutions, and registered dietitians—to verify information. Additionally, consumers can consult major health organizations for interpretations of nutrition research. Such organizations include ACSH (online at www.acsh.org) and the American Dietetic Association (online at www.eatright.org). Consumers without Internet access can reach nutrition experts by phone through the ADA’s National Center for Nutrition and Dietetics (call 1-900-CALL-AN-RD). According to the ADA, the biggest barrier most Americans perceive to changing their diet habits for the better is their confusion over nutrition-related reports. With this survey, ACSH challenges America’s magazines to report accurately on nutrition—100 percent of the time.

References