Food Formulation Trends: Oils and Fats

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Fat Phobia Ending: Consumers Embrace Fat as Healthful

Among its Top 10 nutrition trends for 2017, *Gourmet Retailer* included, “Fat Phobia is Ending.” This was the pronouncement based on recent conclusions in the scientific literature indicating no clear association between saturated fat and the risk of heart disease in addition to a society more open to embracing healthy fats. “Grassfed . . . Everything” was also listed among the Top 10 trends. (*Gourmet Retailer*, Jan. 6, 2017)

The same 2016 IFIC study showing that 39% of Americans still try to avoid fats and oils also found that 8% are trying to consume fats and oils, with those ages 18 to 34 most likely to do so. Packaged Facts interprets this to suggest that younger consumers, who did not experience firsthand, as adults, the low-fat craze of the 1990s and early 2000s, do not have to overcome negative perceptions about fat in general, and instead readily embrace and seek out specific fats for their health benefits.

Fat Not Taboo for Today’s Diet Ideologies

The Hartman Group (Bellvue, WA), thought leaders in relation to demand side trends in the food industry, reports that nearly every consumer currently practices a diet ideology and has a system of ideas and ideals when it comes to eating habits. These habits are much more deliberate these days when it comes to nutrition, according to the firm. Whereas the term “diet” used to refer to short-term crash diets, silver bullet products, and eating to look good, today’s diets are personalized and focus on balance, wellness, and energy. The *Health and Wellness 2015* report indicated that in the previous year, Americans tried diets that did not strive to severely restrict or eliminate fat, including 4% of Americans who have tried the Atkins diet and 3% who have tried a Paleo diet.

Today, weight loss objectives are often replaced with “eating healthy,” and whether the chosen diet is plant-based or Paleo, it includes eating more “good” fats. The Hartman Group notes that nutritionally driven diets popular today reflect consumers who appreciate and are curious about ingredients “formerly vilified,” including fat. The firm claims that today’s active health and wellness consumers seek out “good” fat, stocking up on lard from natural co-ops, rendering their own duck fat, and eating French fries cooked in chicken fat at restaurants such as Damn the Weather, a hip eatery in Seattle. The view is expressed that these new dieting behaviors, currently pursued by active health and wellness consumers are diffusing into the mainstream. (*Heartbeat*, [www.hartman-group.com](http://www.hartman-group.com), Aug. 30, 2016)
Animal Fats Demonized for Too Long

Announced in November 2016, the Healthy Fats Coalition (HFC) was formed as an educational initiative by “like-minded” organizations, companies, and individuals to promote the notion that healthy fats are an essential part of the American diet, that they are here to stay, and not just a passing fad. The organization wishes to dispel misconceptions about animal fat and create “enlightened conversation about the food we eat, through new and editorial commentary, social media conversations, opinion surveys, and more.”

Visitors to the HFC website (www.healthyfatscoalition.org) are encouraged to “join the movement” and sign up to receive news and learn about upcoming events. The Coalition’s logo, shown in Figure 2-6, features a cow, a pig, and a duck. The website home page shows an array of food products, including a glass of milk, a wedge of cheese, dried beans, raw chicken breast, raw meat, raw salmon, eggs, and some nuts.

Rationale for forming the Coalition is that “animal fats have been demonized for too long.” HFC explains its position largely by means of comparison to trans fat and by claiming that the negative health associations with animal fats are less bad than once thought. This is communicated in large type on the website, which carries the quote, “Nature doesn’t make bad fats–factories do,” attributed to Ancestralhealthguy. In addition, the website states:
Our mission is simple: affirm that minimally processed animal fats deserve a central place in the American diet—and in the popular imagination. We believe that animal fats have been demonized for too long. Fat matters both for taste and for general health and well-being. The reality is that animal fats are not as problematic as they once were thought to be, they have tangible health benefits, and their artificial/manufactured substitutes are far worse than originally thought. . . .

(www.healthyfatscoalition.org, viewed Dec. 7, 2016)

According to the Frequently Asked Questions (FAQ) page, HFC is an awareness campaign, “reflecting the marked change in what Americans think about the health benefits of minimally-processed animal fats.”

Behind the HFC is Coast Packing Company, a supplier of animal fat shortenings in the Western United States. Founding supporters include the Weston A. Price Foundation; Bottega Americano (an Italian restaurant in San Diego); Fatworks, an online retailer of premium traditional fats (beef tallow, lard, and duck fat) based in Boulder, CO; Tendergrass Farms of Floyd, VA, a supplier of certified organic processed meat and poultry products; Elizabeth Swenson, author of The Artisan Lard Cookbook; and HeartBrand Beef/Akaushi Cattle of Flatonia, TX. Board members and technical advisors are currently being recruited and HFC expects to announce them in early 2017. (PR Newswire, Nov. 21, 2016)

In The Artisan Lard Cookbook of Old World Breads and Spreads (2014), Ms. Swenson states, “The rush to banish animal fats from our diets has exposed us to the health risks of (artificial) trans fats and oxidizing vegetable oils. . . .” She also acknowledges, “If there’s a silver lining to those low-fat years, it’s this: We learned that fat is the soul of flavour. Food is tasteless and cooking nearly impossible without fat. . . .”

“Smart Fat” Boosts Weight Loss, Fights Disease, & Slows Aging

Despite current 2015 - 2020 Dietary Guidelines for Americans and American Heart Association recommendations that Americans consume more MUFAs and PUFAs, not all scientists agree. In Smart Fat: Eat More Fat. Lose More Weight. Get Health Now. (HarperCollins, 2016), authors Steven Masley, M.D. and Jonny Bowden, Ph.D., C.N.S., suggest that the two main physiological reasons for adding smart fat to the diet are to
reduce inflammation, described as the basis for nearly all degenerative diseases and a huge roadblock to permanent weight loss, and to balance hormones, especially insulin, leptin, and cortisol, which relate to hunger. Their premise is that hormone balance is necessary to lose weight.

The authors advance the notion that vegetable fats are actually polyunsaturated or plant grain oils, primarily from corn and soybeans, which contain large amounts of pro-inflammatory omega-6 fats. Along with others in the nutrition and health communities, they express concern about the ratio of omega-6 to omega-3 fats being consumed in the diet. It is estimated that the current omega-6: omega-3 consumption ratio in the United States is about 16:1, equating to 1,600% more pro-inflammatory than anti-inflammatory impact. A ratio of 1:1 is considered ideal, with anything 4:1 and lower considered acceptable. The Smart Fat authors propose that if the ratio of omega-6 to omega-3 is properly calibrated, it is possible to break the cycle of inflammation, making it possible to lose weight, fight disease, and stop accelerated aging.

Masley and Bowden classify fats as “good” (smart), “bad” (dumb), and neutral. Good fats include olives, olive oil, avocados, most nuts (including almonds, pecans, walnuts, pistachios, hazelnuts, and macadamia nuts), seeds (chia, flax, and pumpkin), fatty fish and fish oils, dark chocolate, coconut, coconut oil, and medium-chain triglycerides (MCTs). Bad fats include trans fats and partially hydrogenated oils, highly-refined “vegetable” oils, fats from animals injected or fed “chemicals, hormones, and pesticides,” and fats high in omega-6 fatty acids. Neutral fats consist of certain saturated fats, described as “clean,” such as palm oil or the fat found naturally in grass-fed and organically raised protein including beef, lard, butter, yogurt, milk, cream, and cheese. “Neutral” means that these fats may not necessarily improve health, but it is believed that they won’t cause harm, despite decades of being demonized.

The authors claim that grain-fed animals are a rich source of omega-6 fats and that consuming meat, milk, eggs, butter, yogurt, cheese, and other products derived from grain-fed animals increases dietary omega-6 fats. Consuming the same products from free-range, grass-fed sources is said to provide a diet with a near perfect omega-6 to omega-3 ratio in beef. For this reason, the authors recommend consuming meat and dairy products from grass-fed cows to avoid health and weight issues.

The Smart Fat authors encourage consumers to choose organic, pastured products, including eggs (with organic, cage-free, omega-3 enriched eggs, at a minimum), butter, milk, yogurt, and cheese. They consider “bad” fats to include trans fats, omega-6 fats, and “dirty oils.” “Dirty oils” are those considered high in omega-6 fatty acids produced from “factory-farmed” crops heavily sprayed with pesticides and processed with toxic
chemicals and extreme heat. They are high in linoleic acid. Linoleic acid contributes to the oxidation of small, dense LDL cholesterol particles that are included in the formation of arterial plaque. When exposed to high heat, oxidized linoleic acid metabolites (OXYLAMs) are formed and are strongly associated with heart disease, Alzheimer’s disease, chronic pain, and nonalcoholic fatty-liver disease.

**Eat Fat to Lose Weight**

Sharing certain similar scientific perspectives with *Smart Fat*, albeit with his own, distinctive interpretation, concerns, priorities, and recommendations is Dr. Mark Hyman, M.D., who created a buzz in 2016 with the publication of his *New York Times* best-seller, *Eat Fat, Get Thin: Why the Fat We Eat is the Key to Sustained Weight Loss and Vibrant Health*. (Little, Brown and Company, 2016) He advances controversial ideas about fat that fly in the face of long standing advice to reduce saturated fat intake, replace it with polyunsaturated fats, and focus on reducing the level of LDL cholesterol. Dr. Hyman advances the theory that LDL particle count and particle size are more important predictors of heart disease and death risk, not LDL level. Despite recommendations from the *Dietary Guidelines for Americans*, the Institutes of Medicine, the American Heart Association, and other health authorities to increase polyunsaturated fat consumption, Dr. Hyman discourages it both generally and specifically in relation to omega-6 fats, which are found in corn, soy, canola, sunflower, and safflower oils.

Dr. Hyman refers to safflower oil as a concentrated source of omega-6 fatty acids that leads to inflammation in the body and he points to research that now shows that people with the highest levels of linoleic acid and omega-6 fat consumption have the highest risk of heart attack. When omega-6 fat oxidizes, it increases the chance that cholesterol will cause a heart attack. He describes the vegetable oils high in omega-6 fatty acids as bland-tasting highly refined, clear oils. Dr. Hyman points out that Americans now eat about 18 billion pounds of soybean oil per year, accounting for ~20% of caloric intake, of which roughly half is the inflammatory omega-6 fatty acid, linoleic acid. He also identifies meat and chicken as major sources of omega-6 fatty acids because most animals are fed grain noting, “You are what your food eats.” He mentions a researcher who links increased intake of polyunsaturated fats with increased incidence of heart disease, obesity, cancer, depression, and aggression.

Since omega-6 fats promote inflammation whereas omega-3 fats are anti-inflammatory, Dr. Hyman recognizes negative health implications of both decreased consumption of omega-3 fats and increased consumption of omega-6 fats. He stresses the importance of
reducing the ratio of omega-6 to omega-3 fats currently in the American diet, which is estimated at about 3:1. He also notes that omega-6 fats prevent conversion in the body of the form of omega-3 fats (ALA) found in plants to DHA and EPA, the forms found in fish that offer the greatest health benefit.

Bottom line, Dr. Hyman recommends that all refined oils be eliminated from the diet, except for extra-virgin olive oil, extra-virgin coconut oil, and a small amount of grass-fed butter or ghee (clarified butter). His basic advice is to stop fearing animal fat but to stick with grass-fed, pasture raised, organic sources, and to get fat from whole foods such as avocados, nuts, and seeds.

**Health Benefits Drive Omega-3 Fats**

Advancing the notion of healthful fats and consumer interest in seeking them out have been findings of research demonstrating health benefits of omega-3 fatty acids. Omega-3 fatty acids are specific types of polyunsaturated fats, including eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), found in salmon, trout, herring, tuna, anchovies, sardines, and mackerel. The omega-3 fatty acid alpha-linolenic acid (ALA) is found in plant sources including flaxseed, walnuts, a green called purslane, other leafy greens, as well as seeds, nuts, and vegetable oils such as canola, soybean, and flaxseed.

A 2013 study conducted by Cargill found that 98% of consumers had heard of omega-3 oils with purchase intent of 23% for DHA, 16% for EPA, and 11% for ALA. ([www.cargil.com](http://www.cargil.com), Oc. 6, 2014) Whereas 39% of Americans attempted to limit or avoid fats and oils overall in 2016, 37% attempted to increase consumption of omega-3 fats (n-3 fats), up from 27% in 2015, and 21% in 2014. Older consumers ages 50 to 80, those with higher incomes, women, and those in better health were most likely to seek out omega-3 fats in 2016. (*Food Decision 2016: Food & Health Survey*, International Food and Information Council Foundation)

Although omega-3 fatty acids have had their share of unwarranted detractors in recent years, in general, consumer interest in these fats has increased as more health benefits have become associated with them. Best known for their heart health benefits, the International Food Information Council Foundation (IFIC) indicates that they are also associated with lowering the risk of developing certain cancers, neurological disorders, and complications from metabolic syndrome and diabetes. IFIC also recognizes that some studies have also demonstrated a positive role for omega-3 fatty acids in the bone health of older adults, healthy pregnancy outcomes, and good visual acuity and