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PREMIUM

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NEWSLETTER

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Editor's Note:

April means spring is here! It is time to get out to the farmer's markets, start a garden, and ramp up the outdoor exercise routine. This issue features easy recipes, news on functional foods and new research about ultra processed foods.

Let us know if you need anything! Just click "Contact Us" at the top of foodandhealth.com

Orange Chicken Stir-fry

Ingredients:

Chicken:
1 pound chicken breasts
1 cup all-purpose flour
1 cup cornstarch
Salt and pepper
2 eggs beaten
1/4 cup canola oil
Sauce:
1 tablespoon grated ginger
1 tablespoon oil
1 tablespoon minced garlic 1 tablespoon soy sauce
Zest of 1 lemon and one orange
1 cup orange juice

Directions:

1. Cut the chicken in 1" pieces. Mix the cornstarch and all-purpose flour in a bowl and add the salt and pepper. Beat the eggs and water in another bowl.
2. Dip the chicken in the eggs and then into the flour. Place the floured chicken pieces on a sheet tray in a single layer.
3. Mix the ingredients for the sauce, whisk, and bring to a boil. Turn off heat.
4. Heat a large wok over medium-high. Add part of the 1/4 cup of oil. Cook the chicken in 2 batches with the oil until it is done.
5. When the chicken is done, place it all back in the pan. Add the sauce, bring to a boil and serve hot. It goes great with rice and steamed veggies.

Nutrition Facts:
Serves 4. Each 1 cup serving: 377 calories, 20 g fat, 1.8 g saturated fat, 54 mg cholesterol, 400 mg sodium, 27 g carbs, 1 g fiber, 5 g sugar, 21 g protein.

Carrot Bunny Muffins

Here is a way to make fun and healthy carrot muffins with a spring or Easter twist. Everyone will love the ears!

Ingredients:
1- 1/2 cups flour
1/2 cup rolled oats (dry)
2 teaspoons baking powder
1 tsp baking soda
1 teaspoon cinnamon
pinch salt
3/4 cup brown sugar
1 cup vegetable oil
2 large eggs
1- 1/2 cups shredded carrots
1/4 cup plain yogurt
Garnishes: 4 oz whipped cream cheese, 1 carrot, slicing tips on mandolin to create ears

Directions:
1. Measure the dry ingredients and sugar into a large mixing bowl. Preheat the oven to 365 degrees. Line a muffin pan with muffin cups.
2. Mix the wet ingredients in another bowl. Add them to the dry ingredients. Mix them together and mix smoothly without over-mixing.
3. Scoop the muffin batter into the cups using an ice cream scoop or measuring cup to keep them uniform in size.
4. Bake in the oven for 25 minutes or until they are done. They are done when they spring back when touched in the center or a toothpick inserted in the center comes clean.
5. Whip the cream cheese and pipe a star on the top of each muffin.
6. Shave the bottom of the carrots on a bias on a mandolin to make ears. Watch the video to see how.
7. Stick the carrot ears in the cream cheese to make ears for the muffins.
8. Serve or refrigerate until later.

Makes 12 muffins. Each muffin: 203 calories, 12 g fat, 2.5 g saturated fat, 35 mg cholesterol, 220 mg sodium, 23 g carbs, 1 g fiber, 15 g sugar, 2.7 g protein

A Dietitian's Insight For Functional Ingredients

There are hundreds of functional ingredients, and more are identified each year. Food manufacturers are eager to find additional ways to promote health qualities in a range of foods, especially foods that aren't generally considered healthy — think cookies, muffins, and crunchy/salty/savory snacks. Functional ingredients are a potentially huge market, with global sales of fortified or functional foods at $292 billion in 2021, up from $274 billion in 2020. Functional food and beverage sales in the United States were $83 billion in 2021, a 6.8% increase from 2020.

This brings up an important and yet unanswered question: do indulgent foods like cookies and crunchy snacks that contain functional ingredients actually promote health, or is the inclusion of functional ingredients more of a marketing strategy?

Just because a food label states that it is a "superfood" or that it contains important-sounding ingredients doesn't mean that the food provides additional health benefits – or even any health benefits. Savvy consumers will look past the marketing on the front of food packages and look instead at the list of ingredients (listed in descending order from what is present in the largest amount by weight) and the Nutrition Facts label. This helps them know exactly what the food provides. Building an eating plan based on whole foods that naturally contain a wide range of nutrients — fruit, vegetables, whole grains, legumes, and nuts and seeds — is the foundation of a healthy diet. Periodically enjoying a food with functional ingredients because you like the flavor fits into an overall healthy eating plan; just don't count on any additional health benefits.

Written By Lynn Grieger, RDN, CDCES, CHWC, CPT

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What Are Functional Ingredients?

Have you heard about *functional foods*? These provide additional health benefits beyond basic nutrition.

Many foods naturally contain these additional health benefits — think fermented foods like kefir or sauerkraut that contain probiotics. Or berries that are high in antioxidants. Including functional foods as part of your daily food choices is an excellent strategy to improve overall health.

Food manufacturers are more frequently adding ingredients to foods to enhance their health benefits, and these additives are also known as functional ingredients. A functional ingredient is a bioactive compound obtained from a variety of sources, including fruits and vegetables, marine sources, microorganisms, and inorganic raw materials. Food industry research published in 2019 showed that a large percentage of consumers are interested in foods that enhance mood, increase energy, help with weight loss, improve digestion, reduce risk of heart disease, and promote sleep.

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Written By Lynn Grieger, RDN, CDCES, CHWC, CPT

What Are Functional Ingredients?

What are some functional ingredients?

There are hundreds of functional ingredients! 2021 food industry research highlights seven that generate high interest from consumers:

Functional Ingredient	Consumer interest
Turmeric	Improved digestive health and reduced inflammation
Collagen	Bone, joint and brain health
Green Coffee Extract	Increased energy
Electrolytes	Hydration and energy
Lavender	Improved mood and sleep
Beta Glucans	Improved immunity
Probiotics	Gut health and improved immunity

Just because consumers believe that these functional ingredients promote health doesn't mean that science necessarily supports these beliefs. Functional ingredients have the potential to play an important role in human health, but reaching that potential depends on accumulating a large body of scientific research that proves both benefits and safety. An analysis of over 100 recent papers that reported potential health effects from plant-derived functional ingredients in multiple journals showed that few provided sufficient information to allow the research to be replicated and very few had tested multiple batches of an ingredient.

Written By Lynn Grieger, RDN, CDCES, CHWC, CPT

Snack-A-Meal

While scrolling Instagram the other day, I saw an ad that read, "Can a cookie replace your dinner?" It was promoting a "healthy" cookie with fake fiber, sugar alcohols, and protein powder. Is this what we've come to? Hard pass.

I get it. Now that the pandemic isn't as big a threat to our health, Americans have returned to "life as usual." The popularity of taking time to cook meals at home has waned as people have resumed their busy schedules. Rather than full meals, many have turned to convenience, and grab-n-go items are on the rise. CNN reports that snack sales have increased 50% over the past five years. Co-founder and director of The Food People (a UK-based think tank that analyzes food trends and new product developments) Charles Banks notes that consumers are looking for more sustainable food sources and inexpensive, convenient items. One such trend is having snacks for dinner. These snacks don't need to be unhealthy or even heavily processed. When I think of snacking, I think of the small foods I graze on throughout the day: fruit, nuts, yogurt, cottage cheese, etc. Snacking instead of sitting for a meal is on the rise, so let's take a look at the pros and cons of this approach…

Pros:

- Snacks can help build a better nutrition outcome. One study found that fruit and vegetable consumption improves if snacks are eaten earlier in the day.
- Snacks can be convenient. Non-perishable items like half a peanut butter sandwich, a trail mix, or a protein bar are all great snacks. One study found that a 200-calorie nut-based protein bar did not impact the risk for weight gain.
- Snacks are a better alternative than completely skipping a meal. A 2020 food and health survey found that 25% of Americans skip lunch.
- Kids can make up for missing nutrients in their diet (such as calcium, iron, and fiber) through snacking.

Cons:

- If you reach for high-calorie or high-sugar snacks too often, you could face undesirable weight gain or elevated blood sugar.
- Similarly, ultra-processed, low-nutrient-quality snacks add fat, sugar, sodium, and calories, but not much nutrition. They may also alter taste buds and increase your preference for these foods.
- Snacks can be expensive. Protein bars can cost anywhere from $1.50 to $4.00 each. Consider cost if you adopt this approach.
- Sitting down for family meals reduces depression, substance use, and chances of risky behavior. Snacking for a meal could mean less time spent on family meals.

Written By Lisa Andrews, MEd, RD, LD

Snack-A-Meal

8 Nutritious Grab-N-Go Snack Ideas:

1. Trail mix of lightly salted nuts or seeds, Cheerios, raisins, and dried cherries.
2. Protein bar (look for ones with ten or more grams of protein, 3 grams or fewer of saturated fat, and 8 grams or fewer of added sugar)
3. Light string cheese and whole grain crackers
4. Greek yogurt and grapes
5. Apple, grapes, banana, pesches, plums, or berries with cheese or nuts
6. A turkey and cheese roll-up in a whole wheat tortilla
7. Hummus and olives with whole-grain pita chips
8. Dates with peanut or almond butter

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Tips for Reducing Ultra-Processed Foods

In light of the apparent link between ultra-processed food and leptin resistance in women, you may need to check in with your audience about their eating patterns.

Unsure about what exactly healthcare providers should advise? Consider the following…

1. Limit intake of ultra-processed foods such as fast food, chips, commercial pastries, and other low nutrient quality food.
2. Include a variety of fruits and vegetables daily.
3. Add beans or lentils to salads and soups to increase dietary fiber.
4. Try a variety of whole grains such as barley, bulgur, farro, and quinoa.
5. Encourage fermented foods such as cottage cheese, kefir, kimchi, sauerkraut, and yogurt.
6. Use brown rice instead of white rice. Try whole grain breads and cereals.

Reference:

Fernandes AE, et al. Differences in the gut microbiota of women according to ultraprocessed food consumption. Nutr Metab Cardiovasc Dis. 2022;doi:10.1016/j.numecd.2022.09.025.

Research Highlight: Ultra-processed Food Intake Linked with Leptin Resistance in Women

Hey ladies, we've got one if you need a good reason to skip the chips. A recent study indicates that women who consume more ultra-processed foods are more susceptible to leptin resistance and could have changes in their gut bacteria. Leptin resistance is linked with pro-inflammatory conditions, neuroinflammation, and metabolic disorders, including obesity.

Ariana E. Fernandes, MS, a nutritionist in the department of endocrinology and metabolism and faculty of medicine member at hospital das clinicas at the university of são paolo, notes her work is some of the first to identify obesity-associated biometrics through diet quality markers and gut microbiota. Along with changes in gut microbiota, ultra-processed food intake was linked with leptin levels, which could impact leptin resistance.

This cross-sectional study examined 59 women (aged 18 to 40) from january 2018 to january 2022. Anthropometric and metabolic data were collected, and subjects completed three 24-hour food recalls on two weekdays and one weekend day. Classifications were used to categorize foods as unprocessed or minimally-processed, processed ingredients, processed food, or ultra-processed food. Stool samples were collected at home and analyzed in a lab.

Within the subjects, 20 women had obesity, 20 were of average weight, and 19 were listed as lean with a bmi below 18. The mean calorie consumption was roughly 1625 kcal per day. Unprocessed foods accounted for around 52% of total calorie intake and processed foods accounted for over 10% of total calories.

By Lisa Andrews, MEd, RD, LD

Research Highlight: Ultra-processed Food Intake Linked with Leptin Resistance in Women

Ultra-processed foods made up almost 32% of total calories. In those consuming more unprocessed or minimally processed foods, leptin-adjusted fat mass levels were lower, while those eating more ultra-processed foods had higher levels. Low levels of leptin improve leptin sensitivity and decrease leptin resistance.

Leptin resistance may lead to obesity because the brain does not respond to leptin, and a person does not experience satiety. When this occurs, the body is unable to sense hormonal messages that tell the body to stop eating.

Researchers identified three species of gut microbiota positively linked with unprocessed or minimally-processed foods and twelve that were negatively correlated. In addition, five species were positively linked with ultra-processed food intake, and four were negatively correlated. Microbiota diversity was not correlated with food intake evaluated by processing level.

It's unclear if the higher levels of some bacteria are linked with healthier parameters. More studies are necessary to understand how species-specific increases impact different populations. The environment, as well as genetics, are also important components that modify the microbiota.

A more detailed classification of bacterial strains is needed to explain the impact of ultra-processed or minimally processed foods on species that are beneficial or detrimental to health.

Reference:

Fernandes AE, et al. Differences in the gut microbiota of women according to ultra-processed food consumption. Nutr Metab Cardiovasc Dis. 2022;doi:10.1016/j.numecd.2022.09.025.

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