### **Anticipating Surgery?**

# Be proactive for better surgical results: start your "prehab" prescription today!



#### by Miles Hassell MD

This handout reviews food and activity choices associated with improved surgery outcomes and is adapted from *Good Food, Great Medicine* (4<sup>th</sup> edition), a Mediterranean diet and lifestyle guide and cookbook. The book is a practical, easy-to-read resource offering both the evidence and the tools to help prevent or reverse heart disease and type 2 diabetes, control high blood pressure, improve cholesterol levels, reduce risk of stroke, dementia, and cancer, and lose weight where appropriate. (You will find this handout as well as other helpful lifestyle medicine topics like *Weight Loss and Diabetes Reversal, Controlling Cholesterol,* and *Cancer Prevention and Survivorship* on the *resources* tab at goodfoodgreatmedicine.com.)

The following "prehab" program will jump-start your recovery even <u>before</u> surgery. (The heightened surgical risks presented by diabetes and excess weight are particularly significant obstacles to recovery – see next page for more details.)

Eat a wide variety of whole foods, including plenty of protein: An omnivorous diet based on a Mediterranean-style eating pattern has the best evidence for improving health, and the foods that improve overall health also contribute to better surgical outcomes. Eat vegetables and whole fruit with every meal and snack, and include high-quality protein like oil-rich fish (salmon, tuna, sardines, etc.), shellfish, or unprocessed meat (like chicken, red meat, etc.) on most days, as well as eggs, whole milk dairy, raw nuts and seeds, beans, lentils, and true whole grains (see page 39 in Good Food, Great Medicine). The healthy fat component is also important: evidence currently favors extra-virgin olive oil, but other traditional fats like butter and virgin coconut oil are also reasonable choices.

Prepare your food from scratch: The foods you prepare for yourself at home are generally less processed, have a higher nutritional content, and are lower in sugars than commercially prepared foods. If possible, make meals ahead and freeze. Focus on

easy-to-prepare meals and familiar foods that sound appealing: a comforting homemade soup or meat loaf (page 243) and vegetables is a good start. Tuna salad (page 168)? Scrambled eggs with chopped baby spinach? Simple choices like these are more sustainable. Do your best to avoid the temptation of convenient commercially-prepared options. If you can't avoid them, keep them as simple as possible.

Avoid processed foods and added sugars: This means sweets, sweet drinks and juices, ready-to-eat breakfast cereals, white rice, bread, crackers, and anything made with flour, even whole grain flour. These refined carbohydrates contribute very little useful nutrition, increase blood sugars, are more likely to contribute to higher infection risk, promote weight gain, and displace foods that are better for us. Also avoid highly-refined vegetable oils (see page 67) and preserved meats, like bacon, ham, deli meats, commercial rotisserie chicken, and sausage.

Get good bugs! An important complication we want to avoid is infection, including infectious forms of diarrhea, around the time of surgery. In addition, surgery almost always involves antibiotics, which can disturb normal gut function. Include whole food sources of probiotics (microorganisms that improve gut health) prior to surgery, such as plain whole milk yogurt and kefir. An easy and tasty way to do this is to combine 4 ounces (½ cup) each of yogurt and kefir with blueberries and a ripe banana (or a teaspoon of honey) for sweetening, and blend with an immersion blender into a smoothie (page 166). Another source of good bugs is traditional (salt-cured) sauerkraut, which can be found in the refrigerator section of many supermarkets: use a few tablespoons once a day as a condiment with your main meal. Also, a tablespoon of raw unfiltered apple cider vinegar in a glass of water twice daily can improve the bacterial populations, and may drop blood sugars a bit.

**Avoid constipation**: Often patients suffer from constipation after surgery, partly because of pain medications and reduced activity. The good bugs and fiber in the diet described here will help avoid this, along with plenty of water. Postoperatively we

often also prescribe 5–10 dried prunes a day, and sometimes magnesium oxide tablets. The *Prune Smoothie Pudding* recipe on page 3 of this handout might be helpful, too.

Build fitness and muscle: Be as fit as you can before surgery. If you aren't fit, it's never too late to start. Many people do better with a brief exercise program, such as 5–15 minutes 3 or 4 times daily. Brisk walking, stairs, skip rope, slam ball, Body Blade, weights, and so on. Do as wide a variety of activities as you can and as intensely as your situation allows. Being fit dramatically improves recovery. Just do it!

**Sleep:** Sleep is a valuable contributor to overall health and immunity. Do your best to get 7-9 hours of sleep daily as you approach surgery.

**Nutritional supplements:** Your surgeon may suggest a multivitamin, or specific nutrients such as vitamin C, iron, and zinc.

**Deprescribing**: Go into surgery with as few medications as you can. Go over your medication list with your doctor, and see if there is anything that should be deprescribed.

#### Pre-op and post-op check off list

- 1. Include vegetables and/or whole fruit, protein, and good fat with every meal and snack
- 2. Eat a handful of raw nuts daily
- **3.** Eat probiotic foods daily, such as plain yogurt and kefir flavored to taste and fresh sauerkraut
- **4.** Enjoy coffee and tea, which are healthy drinks but skip the syrup, non-dairy creamer, and sugar substitutes
- 5. For some people, small amounts of alcohol (one serving daily 5 ounces of wine or 12 ounces of beer) with a meal are appropriate but avoid mixed drinks
- **6.** If eating is difficult, an easy homemade soup or smoothie can be a solution: see pages 193 and 167 in *Good Food, Great Medicine*
- 7. Get daily exercise, as varied and as vigorous as is appropriate; some find this easier to achieve in short bursts several times a day – this is especially helpful for blood sugar control
- 8. Get 7–9 hours of sleep daily
- **9.** Take vigorous steps to avoid constipation: fluids, fiber, prunes, and activity are all helpful
- **10.** Avoid processed food with added sugar, sweet drinks, white rice, and anything made with refined grains
- **11.** Avoid highly-processed fats and oils, such as hydrogenated oils found in most margarines and

- commercially-packaged foods as well as highlyprocessed vegetable oils (page 67) like safflower, corn, peanut, soy, and canola
- 12. If you are overweight or have type 2 diabetes, focusing on diabetes reversal and losing weight will also help reduce the risks of surgical complications. Remember to exercise daily, eat well, and avoid refined carbohydrates. For tips on getting started, download the Diabetes Reversal and Weight Loss handout on the resources tab at goodfoodgreatmedicine.com.

#### A whole food Mediterranean diet

A whole food Mediterranean diet combines conventional concepts with minimally processed foods that have their nutrients largely intact.

Eat vegetables with every meal or snack. Also include whole fruit, whole grains, beans and legumes, raw nuts, and seeds. The greatest benefit appears to be associated with vegetable intake. Try to make vegetables, raw and/or cooked, part of every meal, and fresh fruit for dessert.

Eat whole grains and beans daily. Although the contemporary Mediterranean diet includes white rice, white bread, or white pasta, the whole food version replaces them with their 100% whole grain counterparts. Beans can be home-cooked or canned – but if canned, read ingredient lists!

Use extra-virgin olive oil as your main fat. We suggest replacing most other oils and fats with extravirgin olive oil, including for all cooking purposes. (See page 41 of *Good Food, Great Medicine*.) Extravirgin olive oil is also associated with less cancer. Second best is virgin coconut oil and modest amounts of butter.

Eat plenty of fish and other protein. Oil-rich fish are especially high in omega-3 fatty acids and other valuable nutrients – salmon, sardines, tuna, herring, and mackerel, for example. Keep portions of other animal proteins – red meat, chicken, cheese – smallish, taking up no more than ½ of your total plate area. Avoid processed meats.

**Eat cultured dairy.** This includes plain yogurt and kefir (a yogurt-like drink) and cheese. Yogurt and kefir are also a good source of probiotics (microorganisms that benefit the gut), but remember to buy them unsweetened and sweeten them yourself with fruit or raw honey. Most authorities recommend low-fat dairy foods but we are not aware of any good data showing that low-fat dairy is preferable to full-fat dairy.

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<sup>&</sup>lt;sup>1</sup> Psaltopoulou, T. et al. Lipids in Health and Disease 2011;10:127

#### **Green Eggs and Quinoa**

(or brown rice)

This recipe can be found on page 253 of *Good Food, Great Medicine,* 4<sup>th</sup> edition. This is an easy one-dish meal rich in protein, good fat, fiber, and vegetables. It allows lots of flexibility in terms of ingredients: chopped cooked broccoli instead of (or as well as) spinach, for example, or sliced green onions instead of regular onions, or other kinds of cheese. You can also use leftover brown rice or cooked millet (page 220) instead of quinoa. Leftovers are delicious heated for lunch the next day. Using this recipe as a basic model, and given that you probably have eggs, milk, and cheese on hand, you may want to put this on the *Ten Most Useful Recipes* list.

(Serves 4 as a main dish, more as a side dish)

1 bag (16 ounces) frozen chopped spinach -or- 16 ounces fresh spinach, roughly chopped

2–4 tablespoons extra-virgin olive oil 1 medium-large onion in ¼-inch dice (3 cups) Optional: ½ pound of fresh sausage (see note)

#### 6 eggs

1½ cups whole milk

1 teaspoon salt

1 teaspoon freshly ground black pepper

6 ounces sharp cheddar cheese, grated (2 cups)

½ cup freshly grated Parmesan *or* crumbled feta cheese

1½ cups cooked quinoa (recipe this page) or millet (page 220) or brown rice (page 222)

Preheat oven to 300 degrees. Oil a 9x13-inch (3 quart) Pyrex baking dish or similar.

- To thaw frozen spinach or prepare fresh spinach, see previous page. No need to drain the spinach

   it's ready to add to the egg mixture in step 4.
- 2. Heat oil in a 10-inch skillet over medium high heat and sauté onion about 10 minutes or until very tender. Remove from heat and set aside.
- Whisk eggs in a mixing bowl (like an 8-cup Pyrex jug). Add milk, seasoning, cheeses, cooked quinoa, spinach, and sautéed onion, and mix very well.
- **4.** Scrape into oiled baking dish and bake uncovered for about 60 minutes or until it is no longer wet in the center.

#### Note:

▶ You can combine the uncooked mixture hours or even a day ahead: bring to room temperature and stir well before transferring to cooking dish.

- ▶ Adding ½ pound of fresh chicken or pork sausage (page 68) to the sautéed onions in Step 2 will kick up the flavor, the protein, and the crowd-pleasing qualities. Just push the onions to the side and sauté sausage until browned and well crumbled.
- ▶ Suggestions for preparing other kinds of greens are on page 128.

#### Quinoa

Quinoa (KEEN-wah) is a South American grain that looks like ivory-colored millet. Actually, it's not technically a grain but is generally used like one. It's particularly high in protein, and is a good alternative to brown rice — and it cooks in about half the time.

(Makes about 4 cups)

1½ cup quinoa

2¼ cups water

½ teaspoon salt

- Bring water and salt to a boil in a 2-quart pot (one that has a lid) and add quinoa. Bring back to a boil, then reduce to a simmer, cover, and cook for 20 minutes. The water should be absorbed and quinoa should be tender.
- 2. Remove quinoa from the heat. Fluff grains by tossing with a fork, reaching down to the bottom of the pot. Cover again and set aside for 5–10 minutes.

#### **Prune Smoothie Pudding**

This is an alternative to eating dried prunes by themselves. When used for constipation or osteoporosis, the suggested dose is usually about 10 prunes per day: this recipe fills the prescription. By the way, this also makes great baby food! (The recipe is on page 166 of *Good Food, Great Medicine*.)

(Makes about 1¼ cups)

10 dried pitted prunes (see note)
1 cup plain whole milk yogurt

- Cut each prune in half with kitchen scissors to check for rogue pits.
- Combine with yogurt in blender and blend for 30 seconds. Scrape down sides and then blend for another 30 seconds. (Immersion blenders are not efficient here the prunes jam the blade.)

#### Note:

▶ The soft, sticky sort of prune works best. If your prunes are dry, soak in ¼ cup of water overnight.

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Dr. Hassell established the Integrative Medicine Program at Providence Cancer Center in Portland and he is a clinical instructor in the training of Internal Medicine residents, twice named Outstanding Teacher of the Year, and is Associate Medical Director and Professor at Pacific University School of Physician Assistant Studies. He also lectures widely to physician groups about the appropriate integration of lifestyle and conventional medicine. He is the co-author of Good Food, Great Medicine, an evidence-based guide to using a whole food Mediterranean diet in the pursuit of optimal health.

In his private practice Dr. Hassell encourages the vigorous use of evidence-based food and lifestyle choices and has been chosen as one of *Portland's Top Doctors*. Dr. Hassell is available for individual consultations for diagnosis, second opinion, or to develop patient-centered solutions using evidence-based conventional and lifestyle interventions.

#### Visit goodfoodgreatmedicine.com to:

- <u>Download</u> evidence-based handouts on lifestyle topics like: weight loss and diabetes reversal, and blood pressure and cholesterol control
- Order Good Food, Great Medicine (4<sup>th</sup> edition)
- Sign up for our monthly lifestyle newsletter
- Get details about Dr. Hassell's Good Food, Great Medicine weight loss, diabetes, and heart disease and stroke risk reversal classes

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## Good Food Great Medicine

Fourth Edition
Miles Hassell MD
Mea Hassell

a Mediterranean
diet and lifestyle guide
to eating well

The 300 easy-to-read pages present powerful medical evidence to support adopting a whole food Mediterranean diet-and-exercise based lifestyle, with over 200 simple-to-follow recipes using everyday ingredients. The 14-step *Risk Reduction Action Plan* helps:

- prevent or reverse heart disease and stroke
- prevent or reverse type 2 diabetes, prediabetes, metabolic syndrome, and gestational diabetes
- improve cholesterol, blood pressure, and blood sugar with fewer (or no) medications
- reduce cancer risk and improve cancer survivorship
- reduce risk of dementia and Parkinson's disease
- lose weight and keep it off

This is a practical resource for anyone looking for an evidence-based approach to eating well without sacrificing eating enjoyment.

(Available at: <u>Amazon</u>, <u>Powell's Books</u>, <u>Providence</u> <u>Integrative Medicine Program</u>, County Libraries: <u>Multnomah - Clackamas - Washington - Clark</u>.)

For bulk discounts or questions call 503.291.1777.

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