

The Calorie Restriction Society

Frequently Asked Questions

Note: These questions and answers are somewhat out of date. For more up-to-date information, see our longevity wiki.

What distinguishes CR from a weight loss diet?

Weight loss diets are aimed at shedding excess pounds, either for aesthetic reasons, or to avoid the toxic health impacts of obesity. These diets only make sense for people who are overweight.

By contrast, the goal of CR is slower aging and extended lifespan. Weight loss is a side effect. In fact, CR's anti-aging effects manifest themselves even in organisms with a 'healthy' weight.

Weight change is, nevertheless, an easy and convenient way of gauging one's overall Calorie intake. But, while it is worth monitoring one's weight, it is important to remember that weight is just a proxy for Calorie intake.

Please note: Increasing exercise, losing weight, and keeping Calories unchanged is not what CR is about. An exercise regimen that keeps you slim and leaves Calorie intake unchanged is not CR, but simply a health program for weight control to slim down.

How low in weight can (or should) I go?

According to Walford, achieving 10 - 25% below your current set point weight is considered reasonable. The definition for "set point" is somewhat vague: "...that weight toward which one naturally drifts." [Walford, B120YD. See the References and Resources section of this Booklet]. A safe CR weight to strive for is generally considered to be your lean set-point weight: your weight during late teens to mid-20s, providing you were not overweight (e.g. obese) or underweight (e.g. anorexic) in your teenage years.

If I'm just starting CR, why shouldn't I lose weight as fast as I can?

There are two basic reasons:

(1) In early experiments, CR failed to extend the lifespan of adult animals, and sometimes even shortened it. It was Dr. Walford's insight that the reason for this lack of benefit might be that adult animals were less able to adapt to this sudden change. In a groundbreaking study, his team at UCLA were able to show that implementing CR gradually, with especial care to ensuring the nutritional adequacy of the animals' diet, led to gains in lifespan in adult organisms proportionately similar to those observed in weanlings. Many other researchers have since confirmed the efficacy of CR in adult organisms, but only when the restriction of Calories is spread out over the human equivalent of a few years.

(2) Our foods contain various chemicals (e.g. pesticides) that are fat soluble.

Throughout our lives, we tend to accumulate chemicals in our fat as we eat commercially grown and processed foods. Most of these chemicals are very slowly eliminated from our bodies when they are not bound up in our fat. Therefore, losing fat (weight) too quickly will flush lots of toxic chemicals into our bloodstream -- too fast for our bodies to effectively eliminate. The result: dangerously high levels of toxins circulating in our bloodstream and other tissues -- clearly undesirable from a health and/or longevity perspective.

In view of these reasons, humans should implement CR over a span of one to two years, at the very least.

Where can I learn more about CR?

The most recent is the **The Longevity Diet**, by CR Society President Brian M. Delaney and Lisa Walford. The seminal book for a lay audience interested in Calorie Restriction is:

Beyond the 120 Year Diet. Walford, Roy L. Four Walls, Eight Windows; (July 2000). ISBN: 1568581572

Anyone interested in pursuing a calorie-restricted diet for the purpose of extending lifespan, or wanting to gain a basic understanding of the scientific evidence supporting CR, should be familiar with the information in this book.

Dr. Walford has also written two other books which are of interest:

" Anti-Aging Plan, The. Walford, Roy L. Four Walls Eight Windows; (September 1995). ISBN: 1568580495

" Maximum Life Span. Walford, Roy L. W.W. Norton & Company; (May 1985). ASIN: 0393016498

Dr. Walford endorses a high-carbohydrate, low-fat, low-protein diet. However, the research shows that CR works with a wide range of macronutrient ratios. For example, many people find the various "Zone" diet books by Barry Sears useful.

Please be aware that although there seems to be significant scientific support for most of Sears' claims, the books are not well documented. The CR Society email Archives are a good place to find those references. The problem and the caution is this: While most of Sears' information may be well supported, not all of it is, and without specific references, it is difficult to differentiate science from quackery. Therefore, before taking Sears' advice to heart, make sure to confirm it by referencing the actual literature. For those just starting CR, the best Sears Zone book is:

Sears, Barry. Week in the Zone, A. Regan Books; (March 1, 2000). ISBN: 006103083X
See the References and Resources section in this Booklet for additional titles. For convenience, we have also included a CR Quick-Start Guide with this Booklet package. Browse the CR Society's website and consult the How-To Guide more detailed guidelines.

Should I include fasting as part of my CR regimen?

The bottom line for practicing CR is eating fewer Calories. If fasting helps you to reduce your caloric intake, you will probably experience most of the benefits of CR. Studies have shown that rodents fed all they can eat, but fasted every two, three or four days, also have an increase in longevity, though the increase is not quite as great as that of rodents on the standard kind of CR (when implemented in mature organisms).

For some people, this might be an easier way of doing CR since hunger is limited to two or three days a week. Another option, practiced by some, is to eat just once per day. The fasting method of CR (when implemented in mature organisms), however, has not been researched as thoroughly as normal feedings. It is possible that there are unknown dangers to periodic fasting.

How does one reduce or control appetite or otherwise adhere to the diet?

Some of the most time-tested ways of controlling hunger and sticking with your goals are:

- => Filling up on bulky foods which are high in nutrients but low in Calories -- such as most vegetables and fruits
- => Choosing carbohydrates with a low glycemic index (GI) -- a measure of how quickly a food releases sugar into your blood stream. Most starchy foods and dried fruits have high glycemic indexes, while most vegetables and fruits are low-GI. For an extensive list of foods' glycemic indexes, see: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1353331/>
- => Adding a little fat to a meal lowers the GI and releases satiety hormones, which can help control appetite. On the other hand, fat is a very Calorie-dense nutrient. Experiment with your diet to find the right the balance for you.
- => Identify "problem" foods and either do not keep them around, or buy a specific, small amount each week to enjoy at a pre-determined time, as a reward for sticking to your CR eating plan
- => Preparing and/or planning several days of meals ahead of time.
- => Adhering to a daily meal schedule.
- => Eat your foods raw or only minimally cooked
- => Enjoy your food: take the time to savor each bite and chew thoroughly before swallowing
- => Scientific reinforcements ... almost weekly, new research indicates that CR really works. Each new scientific demonstration of the benefits of CR can strengthen your motivation!
- => Social reinforcements ... such as interaction with members of CR Society on the mailing list. Other CR practitioners can be a real source of emotional support and practical tips, and most can attest personally to the tremendous health and other benefits of CR!

What Do People on CR Actually Eat?

Lots of vegetables, some fruit, low-fat protein (e.g., lean beef, turkey or chicken, fish, low-fat dairy, soy and egg whites, etc.) and good fats (e.g. nuts, avocados and olive oil). Just control your total Calorie intake. It can be this simple!

See the Meal Plans section of this Booklet for suggestions. In addition, various books by Roy Walford and Barry Sears have excellent, low-Calorie suggestions - see the References and Resources section of this Booklet.

- How does one practice CR and good nutrition when away from home?

Restaurants

Choose restaurants that offer healthy menu options. Many health-food stores have attached eateries that offer nutritious choices, but such foods are sometimes high in Calories because of added fats or natural sugars. Be careful if the ingredients are not clearly spelled out on the menu.

At fast-food places, choose salad bars, and fill your plate with mostly veggies. For protein, go for egg whites, fish, chicken or turkey breasts, low- or fat-free yogurt or milk. Use olive oil, vinegar and pepper as dressing. More and more fast-food places are making the caloric and other nutrition information available in their restaurants or online; take advantage of these resources. Subway's salads, 7 Low Fat Subs, and Low Carb Wraps made with ham, turkey, chicken breast, tuna salad, seafood, or crab salad are a huge step toward true CR fast foods.

Parties and Holiday meals

If possible, follow the same "rules" as for restaurants above. To reduce appetite, one can also pre-eat before scheduled events. With company, one can then simply munch on servings from a vegetable platter or other low-Calorie or healthy food options.

The bottom line is eating fewer Calories while assuring adequate nutrition. Simply keeping one's portions small, avoiding second helpings or, perhaps, skipping one or more of your other meals (before or after these events) are all strategies that CR dieters can successfully implement.

Are there any sample CR diets to help me construct my own diet?

Yes... many good samples! See the Meal Plans section of this Booklet. In addition, the References and Resources section of this Booklet lists various books by Walford and Sears that also have excellent, low-Calorie suggestions.

Are there any other ways of retarding biological aging or extending lifespan besides CR?

None known to science at this time. Many interventions, such as human growth hormone and other hormone "replacement" therapies, as well as nutritional supplements and a variety of drugs, are claimed by some people to be "anti-aging" therapies. These notions are often plausible-sounding on their surface, and are attractive because of their simplicity and ease of implementation. However as of this writing, there is no reliable evidence to support the notion that anything besides CR is capable of retarding biological aging or extending maximum lifespan in adult mammals.

Of course, many basic health practices -- such as eating a healthy diet and getting regular exercise -- can reduce your risk of premature death. This is quite distinct from the genuine life extension observed in hundreds of published scientific studies on CR.

We all want a quick fix rather than a rigorous regime. More importantly, the best hopes for CR-induced life-extension are just barely sufficient for the youngest of us to reach any sort of "clinical immortality." Hence there are some researchers trying to develop a "CR mimetic" - a drug that would mimic the effects of CR without the need to cut one's Calorie intake. However, no drug, hormone, or supplement has yet been established as an effective CR mimetic in mammals.

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