

Scientific Studies Show That EFAs Prevent Cancer

The great news, presented to the public in a cohesive manner for the first time in this book, is that EFAs have been proven in numerous studies to prevent cancers from forming in conditions and situations where they were expected to form and *would* have formed had EFAs not been administered. Some of these studies also show that EFAs can inhibit the growth of cancer already present in the body. The results of the most significant of these studies are discussed in detail in Chapter 11.

However, the results of a new study we commissioned to directly test the effects of the EFA ratios recommended in this plan were so positive that we want to review them here.

A New EFA Cancer Experiment—Proof That EFAs Work

Starting on page 373, Chapter 11 shows numerous EFA-related studies demonstrating how EFAs minimize cancer growth and how distorted EFAs (transfats) encourage cancer growth.

The Hidden Story of Cancer

For example, in 1997, it was shown that an EFA deficiency in mice allowed cancer to grow faster. Here is their quote:

"It may be concluded that, when a tumor initiator injures the body as a whole, EFAD [Essential Fatty Acid Deficiency], achieved either through a fat-free or an oleic-supplemented diet [like olive oil], behaves as a general promoting condition for tumorigenesis [cancer]." This finding was published in an article titled "Dietary deficiency or enrichment of essential fatty acids modulates tumorigenesis in the whole body of cobalt-60-irradiated mice."⁸

That study makes it clear that an EFA deficiency is a cancercausing problem. The question that had to be answered was would a laboratory experiment under controlled conditions prove that a diet sufficient in EFAs either stop or halt cancer in *vivo* (in the body) and not merely in *vitro* (in a test tube). Too often tests conducted in a test tube give a different result than a test in the body in a *real-life* situation.

I could not find an experiment done on an animal that metabolized EFAs in a similar fashion to humans, such as mice, that were given an EFA formulation comparable to the one suggested in this book (greater parent omega-6 than parent omega-3).⁹ Furthermore, I could not find any experimenter that used oils from organically grown and organically processed sources – guaranteeing that no cancer-causing hydrogenated/oxygen deficient oils were used. There was only one way to see if the EFA suggestion in *The Hidden Story of Cancer* would work under third-party controls using an independent laboratory specializing in oncological (cancer) studies. Furthermore, a third-part statistical expert was employed to calculate the validity of the results. You will see the undeniably powerful results of this

⁸ Prostaglandins Leukot Essent Fatty Acids, 1997 Mar;56(3):239-44.

⁹ Unfortunately, tests utilizing cells grown in a test tube often give different results than in the body. I hate to see animals harmed if there is another way. It is mandatory for an experimenter to be as certain as possible of the outcome based on theoretical analysis, as we were, BEFORE needlessly sacrificing animals. We used the minimum number of mice (20) so as to obtain a statistically meaningful and valid result.

The Missing Link: EFA "Oxygen Magnets"

experiment. Its promise of hope for extending existing cancer patient's lives is nothing short of spectacular.

In 2004 we commissioned an experiment with mice at an independent laboratory experienced in oncological studies. The purpose of the experiment was to show whether pretreatment with organic raw parent EFA oils in the ratios and amounts comparable to our human recommendations, prior to **implantation of breast cancer tumors** in the mice, affected the growth of the cancer cells in any way. A breast cancer strain was chosen because breast cancer is the Number 1 worldwide cause of death by cancer in women. Mice were used because they respond very similarly to humans regarding EFA metabolism and because their shorter lifespan allows all effects and results to occur more quickly.¹⁰

One group of mice was pretreated with the EFA oils for four weeks prior to tumor implantation (Group 2, showing the greatest inhibition of tumor growth at the bottom of the graph in Figure 1), followed by a daily dose (five days a week) for 50 days after implantation of the cancer tumors. A second group was pretreated with EFA oils for two weeks prior to implantation (Group 1, showing less tumor growth at the middle of the graph) and then given the daily dose for the rest of the 50 days. The third group, the control group (Group 3, showing uncontrolled tumor growth at the top of the graph), was not pretreated or given any EFAs at all.

Tumors consisting of two million breast cancer cells each were implanted in the mice and measurement began. The statistical analysis focused on the period from day 26 to 50 to ensure that any hormonal changes and other transitory effects that occurred after implantation had stabilized (as recommended by Dr. Warburg). An independent expert in statistical analysis calculated and reported the results.

¹⁰ The metabolism of n-6 and n-3 PUFAs in rats and mice are similar to humans. (Lands, W.E., et al., *Lipids*, Vol. 25(9), 1990, pages 505-516.) Therefore, studies in mice would be predicted to be similar in humans. Regardless, one must be always aware that mice are not humans. For this reason, many drugs do not work as well in humans as in animals, if at all. Because this EFA formulation was designed specifically for humans and their "parent" omega-6/3 tissue ratios, we would therefore expect human results to be significantly better than results in mice.

The following statistical analysis doesn't suffer from mistakes that often occur that you learned about on page 58. An *F* test, opposed to multiple *t* tests, was used to determine the significance.¹¹

The experiment showed that although the tumors continued to grow in all mice, there was a highly significant 24% smaller tumor size (growth) in the longer four-week pretreatment mice than in the control mice that received no EFA oils at all. This result occurred consistently upon measurements at the day 26 endpoint, the final endpoint (day 50), and at every intermediate point. This same effect occurred with the two-week pretreatment group, although to a lesser extent than the four-week pretreatment group, as would be expected.

Additionally, in the last 10 days of the experiment, there was a whopping 42.8% lower growth volume of the tumors in the four-week pretreated mice than in the tumors in the untreated mice.

These results clearly show the EFAs' value increases with longer pretreatment. A logical conclusion from this result would be that the EFA oils are modifying the cells' internal structure, making them more cancer resistant.

A few additional key points should be mentioned: The oils were given to the mice only five out of seven days each week. The recommended schedule for humans is seven days a week. Although mice use EFAs in a similar fashion as humans, this plan's EFA recommendations were arrived at by considering human tissue structure and human biochemistry. Therefore, the results should be even better in humans than in the mice in the experiment. The dramatic results are present in Figure 1.

Why Did the Cancer Cells Keep Growing?

Now, these results sound good, but you might be wondering why the tumors in all groups of mice continued to grow, even though the pretreated mice's tumors grew significantly less. Does this negate the positive results of the experiment?

¹¹ *F* test means the variation between the means (averages) of *all the groups* divided by the variation *within the groups*. If the groups were the same (no difference) then the F value would equal close to 1. In this case it was greater than 4 with 98% accuracy. All mice were included in this experiment. Unlike most "studies," *none were excluded for any reason*. The bottom line; a very significant result.



Figure 1:Tumor volumes between groups from 26 to 50 days

No, it doesn't. To be able to complete this kind of experiment within a reasonable time, a tumor of sufficient size to be easily measurable had to be used. If we started the experiment with one or very few cancer cells, we would have a great deal of difficulty finding them, much less measuring them, and due to most cancers' slow growth rates, the cells might not have been measurable within the mice's usual lifespan.

Implanting a tumor consisting of 2 million cancer cells is an overwhelming amount for a mouse's system. We expected this avalanche of cancer cells to continue to grow even in the presence of EFAs because there is no safe way you can destroy all of it, no matter what your defense is.

But by the same token, when we saw a significant lower tumor growth in spite of the initial size of the tumors, it was a telling indication that something had acted powerfully against the development of the cancer in the mice's bodies: the EFA oils **must** have a significant cellular modifying capability that made the mice more resistant to developing cancer. This was made clear because both the 2-week pretreated mice and the 4-week pretreated group were given identical EFA doses – only the length of the pretreatment phase differed. In view of this apparent cellular modifying capability, and the fact that naturally occurring cancer begins to develop in the human body very slowly, one cell at a time, we must pose this question: **Given adequate pretreatment with the correct EFAs, would cancer ever normally occur in a human? We believe a high degree of probability exists that the answer is "no."**

The results of this experiment **clearly demonstrate** the cancerprotective properties gained by taking parent EFAs in the ratios recommended in this book.

EFAs Provide Many More Health Benefits Above and Beyond Cancer Protection

This book is about the anticancer solution. However, it is important that you understand that there are other areas EFAs benefit.

In addition to EFAs' cancer-protective properties, EFAs make it possible for your cell membranes to operate optimally for a multitude of other biochemical functions, such as hormone transfer. This includes effective insulin uptake. That's why these critical EFAs help prevent and control diabetes.

Not least of the benefits of adequate EFA supplementation and its resulting increased cellular oxygenation is **greatly increased energy**. Lack of energy is one of Americans' chief complaints. Proper EFA supplementation as given in this book will provide you with a marked improvement in your energy level.

EFAs are the building block of your sexual hormones. With sufficient amounts of EFAs you won't run short because the "raw material" was in short supply. EFAs are also the building blocks of the endocrine system. This system regulates your levels of anxiety, your ability to concentrate and focus, too. Athletes will benefit from increased endurance, increased performance, and better immunity from fatigue.

On the next page is a table showing a sampling of the multitude of additional areas helped with fully functional EFAs. The medical textbooks and medical journals have understood EFAs' importance for years but this information typically is not covered by the popular press.