

Omega 3 Testing FAQ

Q. What is Omega-3 Testing

A. The Omega-3 test offered by EAB measures the EPA+DHA content of red blood cells (RBCs) expressed as a percent of total identified RBC fatty acids. It is measured using a proprietary methodology developed over several years of research by Dr. Bill Harris.

Q. What method does EAB use to measure Omega-3s?

A. The Omega-3 test offered by EAB utilizes a dried blood spot method developed by Omega-3 test expert, Dr. Bill Harris. Dr. Harris has been doing research in omega-3s for 30 years, and has over 80 published research papers in this field.

Q. Why do you use a blood spot method?

A. Blood spot (DBS) and red blood cell (RBC) methods provide the best reflection of tissue omega-3 fatty acid status. These methods offer much less day-to-day variation than do plasma tests. And an acute load of omega-3 fatty acids (from fish or capsules) will have less impact on RBC or DBS.

Q. Should my Omega-3 level be the same regardless of where it is tested?

A. There is no standard test material to which all labs are required to conform. Because there is no formal standard, we utilize the Omega-3 test method that has been accepted in over 100 research publications over the last 9 years, making it the most published of all the commercially-available methods. A significant advantage of the Omega-3 test offered by EAB is the ability to correlate it to clinical outcomes from major epidemiological and interventions studies. (see below for “Research behind the test”).

Q. What research is there supporting this test method?

A. The EAB Omega-3 test utilizes the method developed by Dr. Bill Harris. Dr. Harris has been doing research in omega-3s for 30 years, and has over 80 published research papers in this field. In 2004, he, along with his colleague Clemens von Schacky, MD, a cardiologist from Munich, was the first to propose the Omega-3 level as an independent risk factor for heart disease. More importantly, Dr. Harris is the Principal Investigator for and is using this Omega-3 test in two major epidemiological studies, both funded by the National Institutes of Health (NIH): the Framingham

Heart Study and the Women's Health Initiative's Memory Study. In addition, he will be doing the blood analyses in the "VITAL" study which will be testing the effects of omega-3 fatty acid and/or vitamin D on CHD and cancer incidence in 20,000 subjects. Dr. Harris has used the same method in at least 8 additional clinical studies being funded by the NIH.

Q. What should my Omega-3 level be?

A. The least risk, most benefit comes with an Omega-3 level of over 8%

Q. If I am taking EPA/DHA supplement won't my Omega-3 levels be over 8%?

A. No. There is no way to predict - for any given person - what his/her Omega-3 level will be just by knowing how much fish they eat or how many capsules they take. Individual differences in metabolism, absorption, and genetics make it impossible to predict with certainty how a given person will respond to supplements.

Q. What do I have to do to prepare for the Omega-3 test?

A. No special preparation is required; however it is recommended that you wait 12 hours after taking a fish oil supplement before collecting a specimen. If doing the Omega-3 in conjunction with the LRA, your LRA preparation is fine.

Q. Why don't my EPA and my DHA values add up to the Omega 3 level reported on my results?

A. Whole blood and red blood cells (RBC) are different starting materials and the EPA+DHA content of each is different, but highly correlated. Based on multiple experiments, researchers have derived a mathematical equation that converts the Dried Blood Spot (DBS) EPA+DHA value into the corresponding RBC value (which is the Omega-3 level we report). Therefore, the sum of EPA and DHA in the DBS report will usually be slightly different from the Omega-3 level reported as your result.

Q. What are Omega-3 fatty acids?

A. Omega-3 fatty acids are considered essential fatty acids because they are necessary for human health, but the body can't make them. You have to get them through food.