

List of Lab Tests which Passed ARI Reproducibility Criteria

Explanation: ARI collected two samples from the same person at the same time, and sent both samples to the lab for testing (without the lab's knowledge). This was done for at least 2 people for every test (four or more total samples). The results from the lab were then analyzed to determine how closely they were able to reproduce the same results for the same person. To receive a Pass, we required no more than 10% of the tests had a minor error (differ by 30-50% of the reference range) and no more than 10% of the tests had a major error (differ by 50% or more). We use the reference range instead of the absolute value because some tests have very narrow reference ranges, so it is important to interpret differences in terms of the reference range.

Below is a list of the lab tests which passed. (We do not release the names of lab tests which have not passed, since we are hoping those labs will improve their testing in future).

We also list which labs have a pediatric reference range – we think this is very important for most tests, since children have very different reference ranges than adults for many tests. Some labs even have multiple pediatric reference ranges, as reference ranges for 3 yr olds are often different from those for 17 yr olds for many tests.

We only list labs that have a US reference range – people in other countries often have different reference ranges for many tests.

The assessment was conducted by James Adams, Ph.D. (ARI Science Coordinator), Liz Mumper, M.D. (ARI Medical Coordinator), Nancy O'Hara, M.D., (ARI Medical Instructor), and Gail Szakacs, M.D. – they do not have any commercial ties to any of these laboratories.

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Test	Lab	Pediatric Reference Range? (Yes/No, or list ages if more than one pediatric reference range)	US Reference Range? (Yes/No)	Reference Range based on middle 95% of typical individuals (yes/no)
RBC Essential Minerals				
	Doctor's Data	<4 yr; 4-12 yr; 13-16 yr	Yes	Yes
	Genova	No	Yes	95% of healthy individuals
	Metametrix	No	Yes	Yes
RBC Toxic Elements				
	Doctor's Data	< 4 yr; 4-12 yr; 13-16 yr	Yes	Yes
	Metametrix	No	Yes	Yes
Whole Blood Minerals and Toxics				
	Doctor's Data	< 4 yr; 4-12 yr; 13-16 yr	Yes	Yes
Urine Toxic Metals				
	Doctor's Data	< 4 yr; 4-12 yr; 13-16 yr	Yes	Yes
	Genova	No	Yes	Yes
	Metametrix	No	Yes	Yes
Urine Essential Minerals				
	Doctor's Data	< 4 yr; 4-12 yr; 13-16 yr	Yes	Yes
	Genova	No	Yes	Yes
	Metametrix	No	Yes	Yes
Plasma Sulfate				
	Vitamin Diagnostics	Yes	yes	Yes
Plasma Amino Acids				
	Metametrix	Yes	Yes	Yes
Urine Amino Acids				
	Doctor's Data	< 4 yr; 4-12 yr; 13-16 yr	Yes	Yes
	Genova	< 4 yr; 4-12 yr; 13+	Yes	Yes
	Great Plains Lab	Yes	Yes	Yes

	Metametrix	No	Yes	Yes
	Vitamin Diagnostics	Yes	Yes	Yes
Plasma SAM/SAH				
	Vitamin Diagnostics	available Oct 2009	Yes	Yes
RBC Fatty Acids				
	Genova	No	Yes	Yes
	Metametrix	No	Yes	Yes
	Vitamin Diagnostics	Yes	Yes	Yes
Platelet Neurotransmitters				
	Vitamin Diagnostics	Yes	Yes	Yes
Vitamins				
	Vitamin Diagnostics	Yes	Yes	Yes
Organic Acid Profile				
	Genova	Yes 2-4 yr 5-12 yr	Yes	Yes (in good health)
	Great Plains Lab	Yes	Yes	Yes
	Metametrix	Yes	Yes	Yes
Urinary Porphyrins				
	Laboratoire Philippe Auguste	0-2 yr; 2-10 yr; 10-16 yr;	International Reference Range (approximately 80% from US)	Special Reference Range – see below
	Metametrix	No	Yes	Yes
Comprehensive Stool Analysis				
	Doctor's Data	No	N/A	N/A
	Genova	No	Yes	95% of healthy individuals
Food Allergy Test				
	Alletess	Yes (in-house range)	Yes	No
	Genova	No	Yes	Yes
	Metametrix	No	Yes	Yes
	Immuno Laboratories	?	?	?

Note that, due to an inadvertent oversight, the food allergy testing by Great Plains was not assessed. This oversight will be corrected soon, and this report will be updated at that time.

*The reference range for urinary porphyrins by Laboratoire Philippe Auguste is based on healthy individuals with no elevation in neuroinflammation (urinary neopterin) and oxidative stress (8OHdG - DNA oxidative damage, 8OHG - RNA oxidative damage and F-2 alpha-Isoprostane (membrane oxidative damage))

This represents a biologically healthy subset of the general population.