



LECTINS AND TISSUES THEY BIND TO

Marla Pietruszko BSc R.H.N.

Lectins & The Cells They Bind To										
CELLS WITH AN AFFINITY TO LECTINS	WGA	SBA	PNA	LCA	ABL	LEA	PSA	STA	PHA	
SKIN # SWEAT GLAND *	# *	#	#	#					#	
SINUSES #	#									
BLOOD AND LYMPH	#	#	#							
COLONIC MUCOSA	#	#	#	#					#	
IGA	#		#				#			
TONSILS	#	#								
STOMACH # \$PARIETAL CELLS *	#	*	*			*				
DUODENUM	#	#								
INTESTINAL M CELLS	#	#				#		#		
CONNECTIVE TISSUE	#			#			#	#	#	
SKELETAL MUSCLE CARTILAGE *	# *	# *	# *	#			#			
THYROID	#	#	#					#	#	
LIVER # GALLBLADDER *	# *	# *	# *					*	# *	
CARDIAC MUSCLE	#	#								
KIDNEY GLOMERULES	#	#	#							
PANCREAS	#				#				#	
EYE # INNER EAR *	# *	# *	#	*			# *		# *	
MAST CELL	#			#			#		#	
BRAIN	#			#					#	

Abbreviations Across the top of the table above:

WGA (wheat germ agglutinin)

SBA (soybean)

PNA(peanut agglutinin)

LCA (lectin)

ABL (Mushroom)\

LEA (tomato)

STA (potato agglutinin)

PHA (kidney bean)

The chart above is taken from "Common Dietary Lectins and Agglutinins that bind to different body tissues and cells. Food Allergy and Intolerance by Brostoff & Challacomb.

This is an incredible research articles that discusses the foods highest in lectins and their association with specific tissues in the body. Notice that Wheat, peanut and legumes are at the top of the list for lectin content.

Agglutinins are the larger class of substances in food that can cause binding of the proteins to carbs. When you have self-tissue antibodies with a defined self tissue target, you need to be careful that you are watching your lectin consumption, especially the higher lectin-containing foods. If you have self-tissue target for the pancreas (Type 1 diabetes), you can see in the chart above, that you should never consume wheat germ agglutinin, mushroom agglutin or kidney bean. Likewise a person with Rheumatoid arthritis should not have wheat, soy or peanut, etc. The idea of this chart is to show you what lectin-foods you should be avoiding if you have specific autoimmune or self-tissue targets.

Notice how all the conditions listed above in the chart should be avoiding wheat. Wheat is one of the most inflammatory foods for individuals with autoimmune tendencies as the lectin content triggers the inflammatory process. Soy and peanut are also quite inflammatory for most conditions. This article. Phytohemagglutinin which is another word for lectin is considered an immune stimulator. Lectins stimulate the immune system and activate Tcells which can lead to tissue destruction. Grains, beans and dairy all contain PHA (aka lectins).

It is always a good idea to get a food sensitivity panel done (ELISA test for IgE, IgA, and IgG antibodies) to determine which foods are your exact triggers. that being said, even if certain foods from the chart above do not show up as triggers, you should still be avoiding them or greatly limiting their consumption as they can still have inflammatory effects. The article under the BLOG tab about lectins explains this in further detail.

