## PARENT RATINGS OF BEHAVIORAL EFFECTS OF BIOMEDICAL INTERVENTIONS Autism Research Institute • 4182 Adams Avenue • San Diego, CA 92116

The parents of autistic children represent a vast and important reservoir of information on the benefits—and adverse effects—of the large variety of drugs and other interventions that have been tried with their children. Since 1967 the Autism Research Institute has been collecting parent ratings of the usefulness of the many interventions tried on their autistic children.

The following data have been collected from the more than 23,700 parents who have completed our questionnaires designed to collect such information. For the purposes of the present table, the parents responses on a six-point scale have been combined into three categories: "made worse" (ratings 1 and 2), "no effect" (ratings 3 and 4), and "made better" (ratings 5 and 6). The "Better: Worse" column gives the number of children who "Got Better" for each one who "Got Worse."

Parent Ratings						Parent Ratings						Parent Ratings					
	Got	No	Got	Better:	No. of		Got	No	Got	<b>Better:</b>	No. of		Got	No	Got	Better:	No. of
<u>DRUGS</u>	Worse	Effect	<b>Better</b>	Worse	<u>Cases</u> <sup>B</sup>	<b>DRUGS</b>	Worse	Effect	<b>Better</b>	Worse	<u>Cases</u> <sup>B</sup>	<b>DRUGS</b>	Worse <sup>A</sup>	Effect	Better	Worse	<u>Cases</u> <sup>B</sup>
Aderall	41%	25%	34%	0.8:1	475	Desipramine	34%	31%	34%	1.0:1	67	Phenobarb.D					
Amphetamine	47%	28%	25%	0.5:1	1217	<u>Dilantin<sup>D</sup></u>						Behavior	47%	37%	16%	0.3:1	1076
Anafranil	32%	38%	30%	1.0:1	381	Behavior	28%	49%	23%	0.8:1	1077	Seizures	17%	43%	40%	2.4:1	480
Antibiotics	31%	57%	12%	0.4:1	1799	Seizures	14%	36%	50%	3.5:1	400	Prolixin	31%	40%	30%	1.0:1	91
Antifungals <sup>C</sup>						Felbatol	21%	53%	26%	1.2:1	43	Prozac	31%	32%	36%	1.2:1	1123
Diflucan	5%	41%	55%	11:1	330	Fenfluramine	20%	52%	28%	1.4:1	459	Risperidal	18%	28%	54%	3.0:1	616
Nystatin	5%	46%	49%	10:1	986	Halcion	37%	37%	26%	0.7:1	54	Ritalin	45%	26%	29%	0.7:1	3813
Atarax	25%	53%	22%	0.9:1	477	Haldol	38%	28%	34%	0.9:1	1154	Secretin					
Benadryl	24%	51%	25%	1.0:1	2711	IVIG	7%	51%	42%	6.3:1	45	Intravenous	7%	44%	48%	6.7:1	333
Beta Blocker	18%	50%	33%	1.9:1	256	Klonapin <sup>D</sup>						Transderm.	10%	49%	41%	4.2:1	132
Buspar	26%	44%	30%	1.1:1	328	Behavior	28%	38%	34%	1.2:1	192	Stelazine	28%	45%	27%	1.0:1	420
Chloral						Seizures	31%	60%	10%	0.3:1	42	Tegretol <sup>D</sup>					
Hydrate	41%	38%	21%	0.5:1	418	Lithium	26%	43%	31%	1.2:1	410	Behavior	25%	45%	31%	1.2:1	1423
Clonidine	21%	31%	47%	2.2:1	1280	Luvox	29%	35%	35%	1.2:1	161	Seizures	12%	33%	55%	4.6:1	762
Clozapine	40%	42%	18%	0.4:1	102	Mellaril	29%	38%	33%	1.2:1	2062	Thorazine	36%	40%	24%	0.7:1	919
Cogentin	19%	54%	27%	1.5:1	162	Mysoline <sup>D</sup>						Tofranil	30%	38%	33%	1.1:1	713
Cylert	45%	35%	20%	0.4:1	600	Behavior	43%	43%	15%	0.3:1	136	Valium	35%	41%	24%	0.7:1	824
Deanol	15%	56%	30%	2.0:1	200	Seizures	19%	59%	22%	1.2:1	64	<b>Zarontin</b> <sup>D</sup>					
<b>Depakene</b> <sup>D</sup>						Naltrexone	20%	46%	34%	1.7:1	221	Behavior	34%	45%	21%	0.6:1	136
Behavior	25%	43%	32%	1.2:1	957	Paxil	29%	30%	41%	1.4:1	283	Seizures	19%	53%	28%	1.4:1	93
Seizures	12%	32%	57%	4.8:1	627	Phenergan	29%	46%	24%	0.8:1	266	Zoloft	33%	33%	34%	1.0:1	321

<b>BIOMEDICAL</b> /	<u>Par</u>	ent Rat	<u>ings</u>			<b>BIOMEDICAL</b> /	Par	ent Rat			
NON-DRUG/	Got	No	Got	Better:		NON-DRUG/	Got	No	Got	Better:	No. of
<b>SUPPLEMENTS</b>	Worse <sup>A</sup>	Effect	Better	Worse	<u>Cases</u> <sup>B</sup>	<b>SUPPLEMENTS</b>	Worse <sup>A</sup>	Effect	<b>Better</b>	Worse	<u>Cases</u> <sup>B</sup>
Vitamin A	2%	58%	41%	23:1	618	Vitamin B3	4%	55%	41%	10:1	659
Calcium <sup>E</sup>	2%	<b>62%</b>	36%	15:1	1378	Vit. B6 alone	8%	63%	30%	3.9:1	620
Cod Liver Oil	3%	47%	50%	16:1	818	Vit. B6/Mag.	4%	49%	47%	10:1	5780
Cod Liver Oil with						Vitamin B12	4%	33%	63%	15:1	192
Bethanecol	16%	45%	39%	2.4:1	56	Vitamin C	2%	57%	41%	18:1	1706
Colostrum	5%	58%	37%	8.1:1	345	Zinc	2%	51%	47%	20:1	1244
Detox. (Chelation) <sup>C</sup>	2%	22%	76%	35:1	324						
Digestive Enzymes	3%	42%	56%	20:1	737	SPECIAL DIETS	3				
DMG	<b>7%</b>	51%	42%	5.6:1	5153		_				
Fatty Acids	2%	42%	55%	23:1	626	Candida Diet	3%	44%	54%	19:1	756
5 HTP	10%	51%	39%	3.7:1	145	Feingold Diet	2%	45%	53%	25:1	758
Folic Acid	3%	54%	42%	12:1	1437	Gluten-/Casein-					
Food Allergy Trtmnt	3%	37%	61%	21:1	560	Free Diet	3%	32%	65%	20:1	1446
Magnesium	6%	65%	29%	4.6:1	301	Removed					
Melatonin	8%	30%	61%	7.3:1	573	Chocolate	2%	49%	49%	30:1	1721
P5P (Vit. B6)	13%	37%	51%	4.0:1	213	Removed Eggs	2%	58%	40%	19:1	1096
Pepcid	9%	63%	28%	3.2:1	93	Removed Milk					
SAMe	15%	66%	19%	1.3:1	62	Products/Dairy	2%	49%	49%	32:1	5574
St. Johns Wort	14%	64%	21%	1.5:1	84	Removed Sugar	2%	51%	48%	24:1	3695
TMG	14%	44%	42%	3.0:1	434	Removed Wheat	2%	50%	48%	29:1	3159
Transfer Factor	8%	53%	39%	4.8:1	98	Rotation Diet	2%	50%	48%	21:1	792

A. "Worse" refers only to worse behavior. Drugs, but not nutrients, typically also cause physical problems if used long-term.

B. No. of cases is cumulative over several decades, so does not reflect current usage levels (e.g., Haldol is now seldom used).

C. Antifungal drugs and chelation are used selectively, where evidence indicates they are needed.

D. Seizure drugs: top line behavior effects, bottom line effects on seizures

E. Calcium effects are not due to dairy-free diet; statistics are similar for milk drinkers and non-milk drinkers.