## 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 27,000 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	<b>Better:</b>			Got	No	Got	Better:			Got	No	Got	Better:	No. of
<u>DRUGS</u>	Worse <sup>A</sup>	Effect	<b>Better</b>	Worse	<u>Cases</u> <sup>B</sup>	<u>DRUGS</u>	Worse	Effect	<b>Better</b>	Worse	Cases <sup>B</sup>	<b>DRUGS</b>	Worse <sup>A</sup>	Effect	Better	Worse	<u>Cases</u> <sup>B</sup>
Actos	19%	60%	21%	1.1:1	140	<u>Dilantin</u> <sup>D</sup>					1	Prolixin	30%	41%	28%	0.9:1	109
Aderall	43%	26%	31%	0.7:1	894	Behavior	28%	49%	23%	0.8:1	1127	Prozac	33%	32%	35%	1.1:1	1391
Amphetamine	47%	28%	25%	0.5:1	1355	Seizures	16%	37%	47%	3.0:1	454	Risperidal	21%	26%	54%	2.6:1	1216
Anafranil	32%	39%	29%	1.1:1	440	Fenfluramine	21%	52%	27%	1.3:1	483	Ritalin	45%	26%	29%	0.6:1	4256
Antibiotics	33%	50%	18%	0.5:1	2507	Haldol	38%	28%	34%	0.9:1	1222	Connetin					
Antifungals <sup>C</sup>						IVIG	<b>7%</b>	39%	54%	7.6:1	142	Secretin	70/	500/	420/	( 4.1	597
Diflucan	5%	34%	<b>62%</b>	13:1	1214	Klonapin <sup>D</sup>						Intravenous	7%	50%	43%	6.4:1	
Nystatin	5%	43%	52%	11:1	1969	Behavior	31%	40%	29%	0.9:1	270	Transderm.	9%	56%	35%	3.9:1	257
Atarax	26%	53%	21%	0.8:1	543	Seizures	29%	55%	16%	0.6:1	86	Stelazine	29%	45%	26%	0.9:1	437
Benadryl	24%	50%	26%	1.1:1	3230	Lithium	22%	48%	31%	1.4:1	515	Steroids	34%	30%	36%	1.1:1	204
Beta Blocker	18%	51%	31%	1.7:1	306	Luvox	31%	37%	32%	1.0:1	251	Tegretol <sup>D</sup>					
Buspar	29%	42%	28%	1.0:1	431	Mellaril	29%	38%	33%	1.2:1	2108	Behavior	25%	45%	30%	1.2:1	1556
Chloral						Mysoline <sup>D</sup>						Seizures	14%	33%	53%	3.8:1	872
Hydrate	42%	39%	19%	0.5:1	498	Behavior	41%	46%	13%	0.3:1	156	Thorazine	36%	40%	24%	0.7:1	945
Clonidine	22%	32%	46%	2.1:1	1658	Seizures	21%	55%	24%	1.1:1	85	Tofranil	30%	38%	32%	1.1:1	785
Clozapine	38%	43%	19%	0.5:1	170	Naltrexone	18%	49%	33%	1.8:1	350	Valium	35%	42%	24%	0.7:1	895
Cogentin	20%	53%	27%	1.4:1	198	Low Dose						Valtrex	8%	42%	50%	6.7:1	238
Cylert	45%	35%	19%	0.4:1	634	Naltrexone	11%	52%	38%	4.0:1	190						
<b>Depakene</b> <sup>D</sup>						Paxil	34%	32%	35%	1.0:1	471	Zarontin <sup>D</sup>					
Behavior	25%	44%	31%	1.2:1	1146	Phenobarb.D	2 1 / 0					Behavior	34%	48%	18%	0.5:1	164
Seizures	12%	33%	55%	4.6:1	761	Behavior	48%	37%	16%	0.3:1	1125	Seizures	20%	55%	25%	1.2:1	125
Desipramine	34%	35%	32%	0.9:1	95	Seizures	18%	44%	38%	2.2:1	543	Zoloft	35%	33%	31%	0.9:1	579

BIOMEDICAL/ NON-DRUG/ SUPPLEMENTS	Got	ent Rat No Effect	Got	Better: Worse		BIOMEDICAL/ NON-DRUG/ SUPPLEMENTS	Got	ent Rat No Effect	Got	Better: Worse	
Calcium <sup>E</sup> Cod Liver Oil Cod Liver Oil with Bethanecol Colostrum Detox. (Chelation) <sup>C</sup> Digestive Enzymes DMG Fatty Acids 5 HTP Folic Acid Food Allergy Trtmnt Hyperbaric Oxygen Therapy Magnesium Melatonin Methyl B12 (nasal) Methyl B12 (subcut.) MT Promoter	3% 4% 11% 6% 3% 3% 8% 2% 11% 5% 2% 5% 6% 8%	60% 41% 53% 56% 23% 35% 35% 39% 42% 50% 31% 30% 65% 26% 45% 22% 47%	36% 55% 36% 38% 74% 62% 59% 47% 45% 67% 65%	11:1 14:1 3.4:1 6.8:1 24:1 19:1 5.3:1 31:1 4.2:1 10:1 27:1 12:1 4.6:1 8.3:1 4.2:1 12:1 5.5:1	2832 2550 203 851 1382 2350 6363 1680 644 2505 1294 219 301 1687 240 899 99	Transfer Factor Vitamin A Vitamin B3 Vit. B6/Mag. Vitamin C Zinc  SPECIAL DIET  Candida Diet Feingold Diet Gluten-/Casein- Free Diet Low Oxalate Diet Removed Chocolate Removed Eggs Removed Milk Products/Dairy Removed Sugar	8% 3% 4% 4% 2% 2%	47% 54% 51% 46% 52% 44%  39% 40% 28% 43% 46% 53%	45% 44% 45% 49% 46% 54% 58% 69% 50% 52% 45%	5.9:1 16:1 10:1 11:1 20:1 24:1 24:1 24:1 24:1 28:1 20:1 32:1 27:1	274 1535 1192 7256 3077 2738 1141 1041 3593 164 2264 1658 6950 4589
P5P (Vit. B6) Pepcid SAMe St. Johns Wort TMG	11% 11% 16% 19% 16%	40% 57% 62% 64% 43%	48% 32% 23% 18% 41%	4.3:1 2.9:1 1.4:1 0.9:1 2.6:1	920 220 244 217 1132	Removed Wheat Rotation Diet Specific Carbo- hydrate Diet	2% 2% 7%	43% 43% 22%	55% 55% 71%	30:1 23:1 10:1	4340 1097 537

- 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.