

Homemade Sports Drink Powder

by Jane Kerstetter

For most of us, rehydrating with plain water is sufficient after light to moderate sweating (mainly because we get plenty of sodium and potassium in our regular diet and sweat contains less salt than you might think). If however, you wish to add sodium and potassium to your beverage, here are some guidelines.

Sodium (Na): The amount of sodium that is found in typical sports drinks range from 10 - 25 mmol/liter (same as 230 - 575 mg Na/liter). Gatorade, for example, contains ~20 mmol Na/liter (same as 460 mg). As a frame of reference, 1/4 teaspoon of table salt contains 680 mg Na.

Potassium (K): The amount of potassium that is found in typical sports drinks range from 0 - 5 mmol/liter (same as 0 - 200 mg/liter). Gatorade, for example, contains ~ 5 mmol K/liter (same as 200 mg). As a frame of reference, an 8 oz glass of OJ contains 13 mmol K; a banana contains 11 mmol K.

Jane's recipe for sports drink:

240 g sugar (approximately 2.5 cups)

3 g KCl (approximately 1/2 teaspoon of Potassium Chloride - Use Morton Salt Substitute, it is all KCl. You will find it next to salt/baking supplies section in grocery store)

10 g NaCl (approximately 1.5 teaspoon of Table Salt)

To flavor the above batch (if you want to), use 15-25 lemon and/or lime flavor packets (True Lemon or True Lime or both). These are found in the grocery store in the Koolaid area.



Procedure: Add sugar to a blender or food processor, and while it is whirling around add the KCl and NaCl and the flavor packets. The whole point here is to make this powder homogenous. No clumping. Store in air tight container in the fridge.

Add 1/2 teaspoon of this mix to any 8 oz beverage for your sports drink.

See the Table below for the nutrient composition. Please note, that doubling the concentration (1 teaspoon in 8 oz) is still within the range of other drinks. The bitter flavor that you may taste is from the KCl. To solve this add more flavor packets or use less KCl.

	Na per 8 oz, g	K per 8 oz, g	Sugar per 8 oz, g
Gatorade Thirst Quencher	110	25	15 (about 60 kcal)
Jane's recipe (1/2 tea/8 oz)	56	22	2-3 (about 10 kcal)
General range	55 - 140	0 - 48	