

## GOOD HEAD ON BEER (A LIQUID TO DRY MALT COMPARISON and other ingredients)

This table illustrates the fermentable and unfermentable percentages in common brewing ingredients particularly as used in brew kits. Fermentables make alcohol and unfermentables add body, smoothness and contribute to head and head retention. The head on a beer comes from both the gas and the stickiness of the unfermentables. The fairest way of comparing dry and liquid malts is to convert all liquid malts into dry. The water in liquid malt doesn't make alcohol (fermentable) and doesn't improve the head (unfermentable), so water is irrelevant to accurate analysis and hence the need to convert to dry. It is generally accepted that Liquid Malt is 60% fermentable and Dry Malt is 70% fermentable.

**Cheers, Younga.**

	<u>Fermentable</u>	<u>Unfermentable</u>
*1.7kg Brew Can (sweetness and bitterness)	1.02kg (60%)	440g +(240g water)
*1.46kg (1.7kg can converted to dry malt)	1.02kg (70%)	440g (30%)
*1kg Dextrose (adds alcohol only)	1kg (100%)	0g
*250g Light Dry Malt (alc., sweetness, body)	175g (70%)	75g (30%)
*250g DE17 Dry Corn Syrup (no sweetness and less alcohol and more body than malt)	50g (20%)	200g (80%)
*250g Lactose (no alc., but sweetness, body)	0g	250g (100%)

### Example 1 Standard Brew

1.7kg Brew Can (converted to dry malt)	1.02kg	440g
1kg Dextrose	<u>1kg</u>	<u>0g</u>
	<u>2.02kg</u>	<u>440g</u>

Each 1kg of fermentables produces 2.4% alcohol in 22 litres, so this example is 4.8% with 440g unfermentables.

### Example 2 Brew with Goodies Pack

1.7kg Brew Can (converted to dry malt)	1.020kg	440g
333g Dextrose	333g	0g
333g Light Dry Malt	233g	100g
333g DE17 Dry Corn Syrup	<u>66g</u>	<u>267g</u>
	<u>1.652kg</u>	<u>807g</u>

**Example 2** has 1.65kg fermentables x 2.4% alcohol = 3.96%. Unfermentables at 807g is 83% more than Example 1. Bottlers add .36% alc. for priming sugar. Keggers factor in batch volume.