

## GOOD HEAD (INC. ADJUNCTS AND A LIQUID TO DRY MALT COMPARISON)

The following table is to illustrate 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. Soda water has gas but no unfermentables. The head on a beer comes from 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 the weight of water is irrelevant to accurate analysis and hence the need to convert to dry. Liquid malt is accepted as being 60% fermentable and dry malt is accepted as being 70% fermentable. The figures below run with that assumption. **Cheers, Younga.**

|  | Fermentable  | Unfermentable     |
|--|--------------|-------------------|
| 1.7kg Brew Can (sweetness and bitterness)  | 1.02kg (60%) | 480g (200g water) |
| 1.46kg (brew can converted to dry malt)  | 1.02kg (70%) | 480g (30%)        |
| 1kg Dextrose (adds alcohol only)   | 1kg (100%)   | 0g                |
| 250g Light Dry Malt (alc, sweet, 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        | 480g        |
| 1kg Dextrose                           | <u>1kg</u>    | <u>0g</u>   |
|  | <u>2.02kg</u> | <u>480g</u> |

Each 1kg of fermentables produces 2.4% alcohol in 22 litres, so this example is 4.8% with 480g unfermentables.

### Example 2 Brew with Goodies Pack

|  |                |             |
|--|----------------|-------------|
| 1.7kg Brew Can (converted to dry malt) | 1.020kg        | 480g        |
| 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>847g</u> |

Example 2 has 1.65kg fermentables x 2.4% alcohol = 3.96%. Unfermentables at 847g is 75% more than Example 1. Bottlers add .36% for priming sugar. Keggers factor in less volume.