



# CYO CAPSULES

## ***SINGLE SUPPLEMENT CAPSULES (EASY)***

Accuracy is crucial to getting optimal results. When you're ready to create your own single supplement capsules, choose a suitable time and place to ensure you're not rushed and set aside an hour when you're free of interruptions, then arrange your equipment on a stable surface where you have plenty of room and follow these step by step instructions.

### **STEP 1**

Insert your empty capsule shells into the capsule machine.

Set up the capsule machine following the instructions provided with the machine in your starter kit.

Load the empty capsules into your machine – the long halves go into the base and the shorter halves go into the lid.

Set the base of your capsule machine on the provided stand and place on a plate or shallow bowl to catch any spillage.

### **STEP 2**

Using the provided scraper, fill all 24 caps with your chosen supplement powder.

Tamp (press down) the filled capsules with the tamper provided to compact the supplement powder.

Fill and tamp (compact) again. Repeat this process until the capsules are full.

### **STEP 3**

Following the instructions provided with the machine, connect the lids of the capsules back onto the capsule body and take the capsules out of the machine.

To do this, remove the base from the stand. You can now place the lid with the capsule tops on the base.

Press down hard to join the capsule pieces together. The base is on a rigid spring and will flatten with adequate pressure.

You can now press down on the back of the lid to release your capsules.

### **STEP 4**

Your single supplement capsules are complete.

We recommend weighing the filled capsules (and deducting the weight of an empty capsule) to determine how much of your supplement powder is in each capsule.

You can now repeat the process to make more capsules or clean the machine for another day.

## MULTIPLE SUPPLEMENT CAPSULES (COMPLEX)

Accuracy is crucial to getting optimal results. When you're ready to create your own blended multi-supplement capsules, choose a suitable time and place to ensure you're not rushed and set aside an hour when you're free of interruptions, then arrange your equipment on a stable surface where you have plenty of room and follow the step by step instructions below.

### STEP 1

Decide your ingredients and the amounts you want.

### STEP 2

Consider the properties of each ingredient. Does one clump together or is it hygroscopic (absorbs moisture). If the properties are not suitable for homogeneous (uniform) mixing, then you may want to consider using Silica (to absorb moisture) or Magnesium Stearate to help with the mixing and to ensure your mixture stays mixed and does not clump back together. Silica and Magnesium Stearate are usually mixed with other powders in amounts of 0.5 – 2% of total powder blend volume.

### STEP 3

Sieve each ingredient to ensure it is a fine uniform powder with no lumps. If you have any lumps use a mortar and pestle to grind (triturate) the lumps into a fine powder.

### STEP 4

Measure the individual density of each ingredient. To do this you need to know how much of each ingredient fits in the capsules. Run each ingredient through the capsule machine and weigh the capsules. Record the weights of the capsules for each ingredient. These weights can be used to calculate the density of each ingredient compared to the other ingredients.

### STEP 5

Decide which ingredient will be the "filler". This ingredient will be the one that fills the remainder of the capsule after your active ingredients.

### STEP 6

Use the multiple ingredient capsule formula\* (see below) to calculate how much filler you will need to accurately make your capsules.

### STEP 7

Weigh out your ingredients with an accurate scale.

### STEP 8

Mix your ingredients together using the geometric dilution technique. Geometric dilution is slowly combining your ingredients at small portions at a time. For example, if you are mixing two powders, take the powder of the smaller amount and place in the pestle. Then add the other powder but only at of equal amount to the lesser powder, leaving the rest out of the mixture for now. Finely grind (triturate) the powder with the mortar so it is completely mixed (Homogeneous). Add an amount of the remaining powder equal to what is in the pestle. Repeat the process until all the powder is mixed and homogeneity is achieved. If you are mixing two powders that are of different colours, then you will be able to see how well it is mixing. If you are mixing two powders of similar colours, then you can use a food grade dye in with the powders to ensure the homogeneity of the mixture.

### STEP 9

Once the powders are completely mixed it is now time to encapsulate your powder. Follow the instructions included with the capsule machine to create your capsules.

### STEP 10

Package your capsules in a container of your choice and include a silica gel pack to keep moisture away.

#### \*MULTIPLE INGREDIENT CAPSULE FORMULA

##### \*TWO INGREDIENT CAPSULE FORMULA

Filler Density per Capsule x (1 - (Target Active Weight per Capsule / Active Component Density per Capsule)) = Necessary Filler Weight per Capsule

##### \*THREE INGREDIENT CAPSULE FORMULA

Substance F (Filler) Density per Capsule x (1 - (Substance A Target Active Weight per Capsule / Substance A Active Component Density per Capsule) + (Substance B Target Active Weight per Capsule / Substance B Active Component Density per Capsule)) = Necessary Substance F Filler Weight per Capsule