

Culture Medium List (your pet food)

Nutrient Agar:

Non-specific medium in which a wide range of microorganism can grow. It is composed of agar, water, yeast extract, peptone, and salt. You can buy the ingredients for this medium at the wetlab in the Waag, but you can also do it yourself at home using beef extract, peptic digest of animal tissue, salt, and agar.

TIPS: Because this is a non-specific medium, you have to be very careful to avoid contamination. Most anything can grow here!

Plate Count Agar:

Non-specific medium in which a wide range of microorganism can grow. It is composed of agar, water, yeast extract, peptone, and glucose. You can buy the ingredients for this medium at the wetlab in the Waag, but you can also do it yourself at home using yeast extract from a drug store, sugar, peptic digest of animal tissue, and agar.

TIPS: Because this is a non-specific medium, you have to be very careful to avoid contamination. Most anything can grow here!

Kombucha Medium:

The simplest medium to prepare, this is just a very sweet tea. Brew a 1L tea bag with 113g of sugar and a liter of water.

TIPS: If you want to play with the texture and color, try different carbon sources (such as glycerine) and different types of tea.

Spirulina Medium:

For the spirulina medium, you will need lot of micronutrients that can be found in art supply shops. These include: 16 g of sodium bicarbonate (NaHCO_3), 0.5 g of potassium nitrate (KNO_3), 0.1 g of ammonium phosphate ($(\text{NH}_4)_3\text{PO}_4$), 0.1 g of potassium sulfate (K_2SO_4), 0.1 g of magnesium sulfate (MgSO_4) in 1L.

TIPS: Spirulina grows in a high pH medium. This discourages the growth of other microorganisms.

Malt Agar:

Malt agar is the right medium for yeast. The recipe is 30g of malt extract and 20 g of agar in 1L of demi (demineralized) water.

TIPS: You can make the malt extract at home by boiling malt in water. Check the pH and set it around 5.5.

Photobacterium Phosphoreum Agar:

If you need some photobacteria in your life, you'll need the accompanying medium to help it grow. Here are two ways to make it: the regular, normal way and the less traditional, biohacker style.

For the first method, you'll need: 8g of nutrient broth, 30g of salt, 10g of glycerol, 5g of calcium carbonate (CaCO_3), and 15g of agar in 1L of demi (demineralized) water.

For the biohacker alternative method: 16 g of Vegetable Bullion powder, 0.7g of yeast extract, 30g of sea salt, 10g of glycerine, 5g of ground chalk, and 15 g of agar in 1L of demi (demineralized) water.

