

Meal-in-a-Bag “MIAB” Food Storage Instructions

Featuring: “Scotch Broth” / Bean Soup

Headline: *“A year’s supply of food for a family of 4 for \$300.”*

The main idea: The main idea is to have a year’s supply of highly nutritious food, that is easy to pre-assemble, store, share, and prepare with many variations from the base recipe ... and is delicious. Many families have rice, beans, wheat, etc. in storage, but if/when it ever became necessary to live from it, it could be a significant challenge to cook or eat from it.

This “Meal-in-a Bag” food storage project and workshop pre-assembles meals that meet or exceed nutritional needs, is easy to assemble, makes a fun family project, and is a quick way to add a month, a few months, or a year’s supply of food. Additionally, the base ingredients can be stored ‘bulk-style’ in buckets and packaged at time of use or years in the future. And – it is very kind to the pocket book!

These instructions offer an overview of this project (and workshop) so that you can duplicate it and improve on it and do it at home with your family. By participating hands-on in the workshop in a “see one – do one – teach one” model, you will discover how to assemble this meal-in-a bag recipe, learn methods for long-term storage, and better understand the “process engineering” so you can adapt and do this in your own home with your own family – and even to use different meal recipes. There are many book/video resources that will expand on this idea and offer many other ideas. Sources are provided to assist in acquiring the materials and devices and additional knowledge that will be helpful in this and similar preparation activities.

Note: This handout discusses the Bean Soup recipe. For other meals, adapt the ingredients, processes and variations to fit your need. (Hint: You can adapt “meal-in-a-jar” recipes for MIAB.)

Benefits:

- Inexpensive
- You probably already have many of the ingredient components in your existing food storage – or they are easy to acquire
- Easy to share with others
- Simple to prepare meal – “Meal-in-a-Bag” – all the basics plus any optional variations pre-assembled
- Delicious
- Many variations from the base, yielding many ways to vary the recipe to avoid food fatigue and offer variety
- Fun family or friend project with like-minded people
- Easy to package in self-contained packaging for long-term storage (meal-in-a-bag)
- Quick simple way to put together a meaningful supply of food – ready to go.

Bean Soup basic (base) recipe ingredients: You can add / substitute / combine any assortment of items you want!

- Red beans - small
- Chick Peas – garbanzo beans
- White or Navy beans
- Black beans
- Lentils
- Pearl Barley
- Rice
- Split Peas
- Bullion
- Salt
- Pepper

Variations and additions (optional at time of pre-packaging or time of preparation):

- Meat – fresh at time of preparation, or freeze dried for long-term food storage packaging
- Vegetables – fresh at time of preparation, or dehydrated / freeze dried for long-term food storage packaging

- Pasta – macaroni, shells, wheel pasta, etc.

Costs & Preparation: The cost per **basic** meal (base recipe) is approximately \$1.00 per meal (actually a little less). This means a three-month supply of this meal base - eaten two times per week (12 weeks), would equal about \$20-25. Doing the rough math with these numbers yields the equivalent of a year's supply of the basic recipe base ingredients for approximately \$300 (priced at Winco Foods). (That assumes you eat this meal – or any of its many variations, every day! Point is, it's a year's supply of basic and highly nutritious meals, whether you choose to eat it every day, or share, or vary it, or whatever!). Variations that add vegetables and meat to the base recipe at time of packaging or actual meal preparation will obviously increase the cost – but still very reasonable. Additional costs for buckets, bins, vacuum seal bag, Mylar bags, silica desiccant and oxygen absorbers need to be considered (dependent on preferred method of long-term storage).

When this recipe meal is prepared complete with two or three cups of vegetables and a cup of meat (beef chunks or chicken depending on the flavor of bullion used), it makes 6-8 quarts in a large stock pot – obviously enough to last an average family for two meals plus lunches – and more....

Packaging: These ingredients may be stored in bulk in 5-gallon buckets (and assembled or drawn upon at time of use), or pre-assembled into "Meal-in-a-Bag" packages as 'complete' individual meals ahead of time in vacuum sealed bags. (They can also be vacuum sealed in Mason jars). If stored in bulk in large containers, make sure to separate beans (which take longer to soak and cook) from other quicker-cooking ingredients. In other words, don't mix all dry ingredients together in one bucket or bag. With a meal-in-a-bag, put individual groupings of ingredients in separate sandwich baggies (use folding top bags so air can escape, not Ziploc) so they can be cooked separately depending on amount of time needed for cooking.

Supplies (to have at home and/or to bring to workshop): For the purposes of a hands-on workshop you are welcome to come participate, learn, help others with their project and/or bring your own food to make up these Meal-in-a-Bag packages for your own food storage. The main point is to learn how and then follow up with your own family to improve your family's food storage. If you want to participate for your own food storage, please at least bring the items on the basic recipe list (see above). You are welcome to bring other of your own supplies (bags, O2 packets, etc.) but there should be enough to at least get you started so you can learn how. The Hints/Tips and Source list below will help you in putting these items together for the workshop, but more importantly for your own family food storage projects. If you don't have any supplies, please at least come and participate by helping others – and learn "how to...".

- 5 lb. bag of each of the ingredient items in the Bean Soup "Basic Recipe", listed previously. (Note: a 5 lb. bag or quantity of each of these items will combine to be enough to create approximately 50 meals. You can scale it beyond that for additional meals- i.e. 25 lbs = approx. 250 bags/meals, etc.)
- Bullion – 35 oz. container size is most convenient (Cash and Carry). Note: 45-50 oz. will be required for 50 bags/meals.
- Salt – at least two 26 oz. round boxes of salt or equivalent
- Pepper – Bring about 20 oz. of black pepper (often come in 16 – 20 oz. plastic containers)
- Sandwich bags – folding "fold-top" (not zip lock). Available at grocery stores. Box of 300...
- Optional – provide your own: Dehydrated or freeze-dried vegetables. (Note: dehydrated vegetables take up 1/3 to 1/2 the space compared to freeze dried product. That means ... Per bag = 1/3 cup dehydrated veggies; 1 cup freeze dried vegetables. Note that using freeze-dried vegetables will require a larger bag size (i.e. quart size).
- Other items: Empty plastic bins, laundry baskets and/or containers to hold, store, transport raw ingredients in, and to transport home. Also, containers/bowls to work from during assembly. Empty #10 cans with lids work well. Bring measuring cups and spoons.
- Food Saver ("Seal-a-Meal") bags (pint size for base recipe; quart size if adding variations).
- Oxygen absorbers & silica desiccant packs.

Hints and Tips:

- Additional recipes for MIABs, along with other preparation-related information is available at www.ApproachingReady.com.
- If you are going to "get serious" about this kind of project, go ahead and purchase larger quantities of all dry bulk ingredients – for example, in 25 lb. bags. If participating in a food storage workshop, you may want to bring a smaller container of these to the workshop for easier handling. Note: Avoid Pinto Beans as they tend to 'mush' when cooked.

- In sourcing these items, you will find the raw ingredients to be slightly less expensive at Winco Grocery Store in the bulk food section. If you purchase these on-site at Winco in the bulk food section, you will bag the product in plastic bags provided (may want to double bag). If you decide to order in higher quantities there, you will need to pre-order online in 25 lb. bags and pick up at Winco store. Allow for added time for ordering and pickup.
- It may be more convenient to get these items at Cash-and-Carry (even though slightly more expensive, but not much) because it is in stock and on shelves. Varieties of beans, rice, barley, split-peas etc. are generally available in 5 lb. bags (except for chick peas which comes in 25 lb. bag, (or get chick peas from Winco bulk food section)).
- Costco –Costco does not have the variety of individual ingredients that Winco and Cash and Carry has. Ingredient items that are at Costco are: Bouillon powder and rice.
- Bullion – Can be obtained from Winco in bulk food section by scooping and filling your own bag (or purchasing a 45-lb. bag preorder). A better solution, is to get the 35oz (or larger) container at Cash and Carry or Costco. It comes sealed, is fresh, and is more convenient. You may also use bouillon cubes, but these are not as convenient. To calculate quantity needed - you will need 6 tsp or cubes per meal-bag assembled. I have done it both ways and find the large container of bullion powder easiest. Don't use oil-based or wet bullion products – stick to dry powder! Bulk food bullion (from Winco) can be scooped into bags as well – but again I recommend trusting it from sealed containers of powder such as are available from the grocery aisle or in larger size containers from Cash and Carry or Costco.
- Vacuum Seal Appliance – Food Saver, Cabella, Vacmaster, etc. Removes air from bags or Mason jars. Remember that “air” is different from “oxygen”, and you still need oxygen absorber packets because not all air is removed, and the bag is semi-permeable. Use any device that can vacuum seal a Vacuum Seal or Food-Saver type bag. They also work on “channeled” Mylar bags. (For the workshop, please bring yours if you have one, or borrow from friend/family. If you don't have one, budget it and get one – it will come in handy for many other uses in a self-reliance food-storage program. It's necessary equipment and is a workhorse in any long-term food preparation endeavor of this type). Note: for MIABs you DO NOT need to vacuum seal bag tight. In fact, a hair flat-iron or “hot jaws” sealer works extremely well to seal bags after hand-compressing most air out of bag.
- Vacuum Seal Bags: Protect from oxygen and moisture. For this project, using pre-cut pint or quart-size bags are most efficient, and therefore recommended (i.e. not full rolls that have to be cut and sealed at one end before filling). You will need bags for this and many other uses, so you may want to order your own supply of vacuum seal bags. Pint-size works for the Bean Soup base recipe; Quart-size bags needed if adding vegetables and/or meat variations at time of packaging. (Note: If you have your own bags, bring and use them. Be prepared to reimburse the host/instructor or if using someone else's bags. You can guesstimate this to be about 30-40 cents per bag +/-). For ordering your own supplies, see the Sources section below).
- Oxygen Absorbers & Desiccant Packet: Rule: ALWAYS USE O2 ABSORBERS! You will need one oxygen absorber packet per vacuum sealed bag. 100cc size is ideal for pint size bags. Use a 1-gram silica desiccant pouch per bag IF it can be separated from ingredients inside bag. Oxygen absorbers are 8-12 cents per packet/bag. Desiccant pouches are also about 12-14 cents each.
- Mylar bags: Protect against oxygen, light, and moisture. For long-term storage, don't trust vacuum seal bags – they are semi-permeable. For long-term storage, place a 5-gallon Mylar bag inside a 5-gallon bucket (Home Depot) and fill it with finished meal bags. Alternatively, fit 2-3 meals in a gallon-size Mylar bag and store in plastic bin (to protect from rodents). Since oxygen absorber packet is inside individual vacuum-sealed bags, you don't need extra O2 packets in Mylar bags or buckets.
- Plastic bins or buckets: Plastic bins/buckets protect against rodents and insects and help with transporting. Be careful storing in large plastic bins due to weight and portability. 5-gallon buckets will store about 15-25 meals in a bag, depending on added vegetable or meat ingredients (i.e. pint-size bags or quart-sized bags). Extend shelf-life by storing in cool location. Use orange Home Depot buckets and lids, not Lowes. (The Lowes buckets have weak lids and can break when stacked). When stacking 5-gallon buckets, it helps to place a board (or two 1x2's) laid across bucket tops in-between layers of buckets, so the side-wall of bucket, not the lid, is bearing the weight. Consider mixing different meals in the same bucket for easier use later on.
- Sandwich bags for Pre-Packaging: Separate cooking/meal ingredients into fold-top sandwich bags, based on cooking times. Consult recipe and cooking instructions to know this. Also pre-package ingredients if you want to use a desiccant pouch and want to keep it separate from food. Also, consider pre-packaging ingredients that have less shelf-life, so you can salvage remaining ingredients in bag if you suspect a problem. Use the Fold-Top style sandwich bags for ingredients, NOT Ziploc sandwich bags, as air needs to be drawn out of bag with vacuum sealer device and all parts of bag contents open to oxygen absorber inside the vacuum sealed bag. Tie the bag closed as you would a large trash bag – spin/flip the bag and tie ends together, or get twist-ties to close sandwich bags. There is no need for the extra steps of sandwich-bag separation if all meal ingredients cook at same time/rate.

Sources & Resources:

Click links to go to online sources, or they can be found online with Google search:

- **MIAB Recipes:** available for download at www.ApproachingReady.com; Also contains other preparation-related information
- **Bulk Foods:** Winco, Cash and Carry, Costco, etc.
- **Vegetables - Dehydrated / Freeze Dried:**
 - #10 Cans: Commercial Vendors: [Honeyville](#); [Thrive](#); [Augason Farms](#); [Emergency Essentials](#); [Walmart](#); Costco;
 - LDS church: [online and Bishop's Storehouse](#) (Carrots, milk and other bulk food)
 - Dehydrates Inc: www.Dehydratesinc.com (800-983-4443) has "Deluxe Carrot Mix" – 40 lb carton of dehydrated Mixed veggie blend @ ~ \$4.00/lb price, plus shipping.
 - Home Dehydrating or Freeze Drying – personal use... [If processing it yourself, make sure to dehydrate or freeze dry completely, and then store protected from moisture or humidity while stored; sealed, O2 absorber, desiccant bag, etc.]
 - Freeze Dryer: [Harvest Right](#) www.harvestright.com Hint: Talk to an owner first; visit/join Facebook group...
 - <https://www.facebook.com/groups/BettysHarvestRightFreezeDryersGroup/?ref=bookmarks>
 - Dehydrator: I recommend [Excalibur brand](#)- from Amazon or other retailers:
- **Vacuum Sealers:** Get a model that has an "accessory port" that allows use of a mason jar lid sealer.
 - [Cabelas](#) ; [Vacmaster](#); [Food Saver](#); [Sorbent Systems](#); Costco; [Amazon](#);
 - Mason Jar Sealer: [Foodsaver](#)
- **Portable Heat Sealer / Impulse Sealers:**
 - [Vacuum Sealers Unlimited](#); [Sorbent Systems](#); [6" Portable Hand Operated Heat Sealer](#)
 - Flat irons – like used for hair; search Amazon. Also find them at Goodwill
- **Vacuum Seal Bags:** Google for sources, or see links below
 - [Sorbent Systems](#); Amazon.com
 - Pint bags (6x10") http://shop.vacuumsealersunlimited.com/ULTRA-Vacuum-Sealer-Bags_c279.htm
 - Quart bags (8x12")
 - http://shop.vacuumsealersunlimited.com/ULTRA-Vacuum-Sealer-Bags_c279.htm
 - Gallon Bags – (you'll want some eventually for other general purposes)- available at above online outlets.
- **Mylar Bags:** Google for other sources. Most commonly used are one-gallon size, and 5-gallon (for buckets of bulk dry food).
 - [Discount Mylar Bags](#); [Sorbent Systems](#);
 - [LDS Bishops Storehouse](#):
https://store.lds.org/webapp/wcs/stores/servlet/Product3_715839595_10557_3074457345616706370_-1_3074457345617048237. (This is a thick 7 mil bag which is very good! LDS only has one-gallon size.)
- **Desiccant Packets:** (Use silica gel desiccant packets packaged in Tyvek® which are FDA approved food grade)
 - [Sorbent Systems](#);
- **O2 absorbers:** [LDS Bishops Storehouse](#) (store.lds.com); [Discount Mylar Bags](#); [Sorbent Systems](#); or Google search
- **Sandwich Bags:** Folding top style: local grocery store or [Amazon](#):
- **Books:**
 - ["The Ultimate Dehydrator Cookbook"](#) by Tammy Gangloff,
 - ["The Meals in a Jar Handbook"](#), by Stephanie Petersen
 - ["Dinner Is in The Jar"](#), by Kathy Clark:
 - ["It's in The Bag"](#) by Michelle Snow:
 - ["The Prepper's Cookbook"](#) by Tess Pennington:
 - ["Meals In A Jar"](#) by Julie Languille

Video Tutorials: (note: Search for "Meal in a Jar", "Dehydrate food", etc. on Youtube): Examples:

- Dehydrate 2 Store: https://www.youtube.com/results?search_query=dehydrate2store
- Meals in a Jar: https://youtu.be/IQ8--eiudHw?list=PLWoOHAKAkB_06yUR1vkRfoCJNhJftalNg

Websites: (Note: There are many).

- Self Reliant School: <http://selfreliantschool.com/introduction-meals-in-jars-chili-jar/>
- The Survival Mom: <http://thesurvivalmom.com/>