

Make Your Own Tilapia Feed

A guide for farming families in American Samoa

Fafaga au lava Tilapia

O se ta'iala mo aiga fai pa i'a i American Samoa



This manual is based on the research and hard work of the following employees of the Oceanic Institute Aquatic Feeds and Nutrition Department

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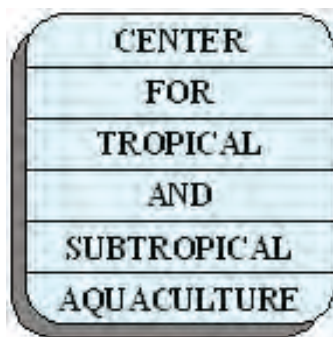
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United States
Department of
Agriculture

National Institute
of Food and
Agriculture



AMERICAN SAMOA
COMMUNITY COLLEGE



This material is based upon work supported by the Center for Tropical and Subtropical Agriculture (CTSA) and the National Institute of Food and Agriculture of the U.S. Department of Agriculture under Award No. 2008-38500-19435. Any opinions, findings, and conclusions or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of the National Institute of Food and Agriculture of the U.S. Department of Agriculture.

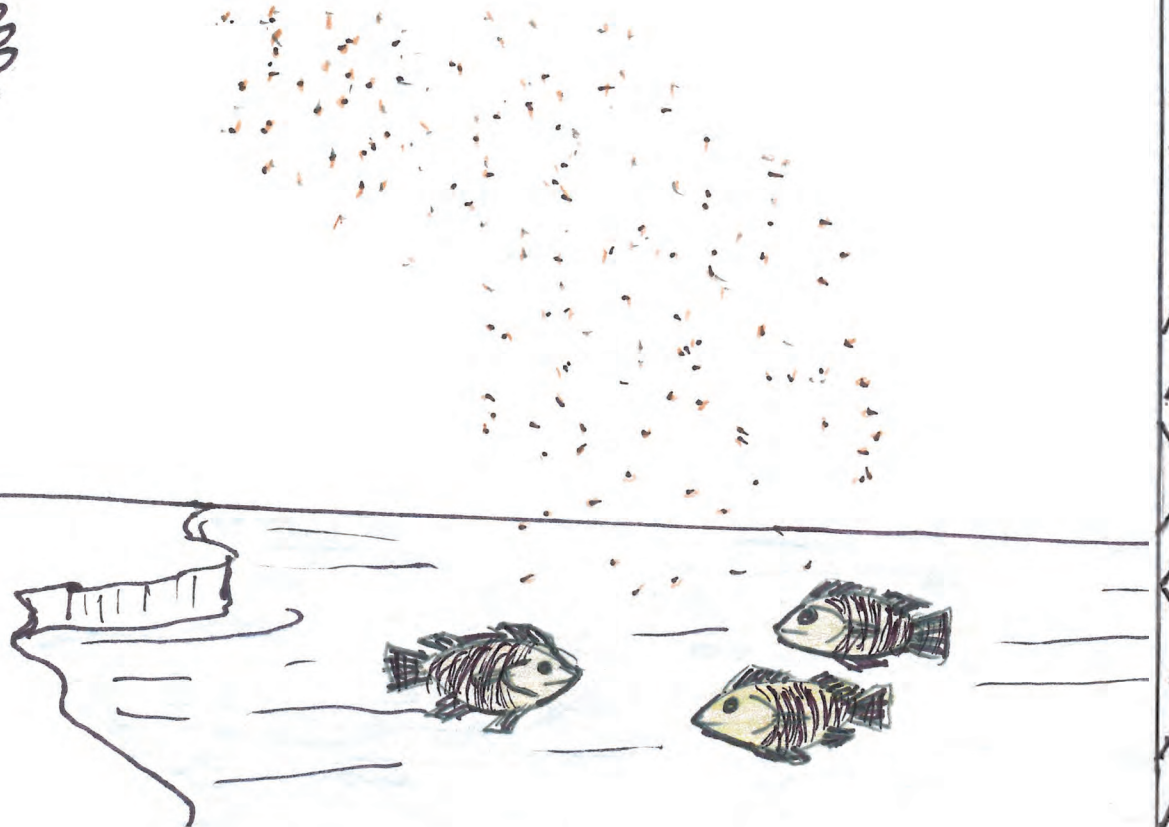


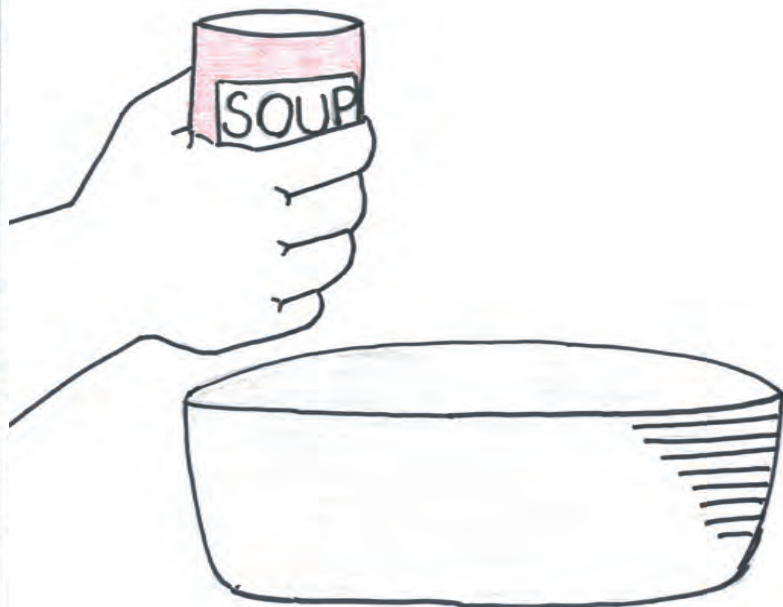
Is your dad a
fish farmer?

O Iou tama o le
tagata e fai lana
fagana i'a?

If he is, you probably already know that fish, just like people, need to eat food every day. BUT, I bet you didn't know that YOU can make fish food in your very own kitchen! It's fun, easy, and can help your family raise healthy fish.

Afai e sa'o o lou tama e fai lana fagana i'a, o lena ua e iloa o i'a, e tai pei lava o tagata, e mana'omia ona aai i aso uma. Pe'ita'i, ta peti e te leiloa e mafai ona E faia meaai a i'a i lou lava umukuka! E faigofie, ma e fesoasoani lou aiga e tausii i'a maloloina ma lelei i le ai.





Ingredients*

- 4 cans flour
- 3 cans fishmeal
- 1 can starch
- 2 cans water
- 5 spoonfuls cooking oil
- 1 Vitamin Packet
- 1 Mineral Packet

**Using an 18.5 oz soup can, this recipe yields 2-2.3 kg (7 cans) of dry pellets. It can be scaled to any size using the ratio of ingredients provided.*

First, gather the ingredients and materials you need to make fish food...start with two mixing bowls, a spoon, and an empty, dry soup can. You will use the soup can and spoon to measure your ingredients, one large bowl to mix dry ingredients, and the other bowl to mix wet ingredients. You will also need a mesh screen to make the feed pellets.

Muamua, ao mea e mana'omia e fai ai meaai a i'a...

amata ona fa'aaoga ia apa lapotopoto 'e lua, o se sipuni ma se atigiapa supo e matu lelei. O le a e fa'aaoga le atigiapa supo e fua ai mea e fa'aaoga mo meaai a i'a, tasi se apa lapotopoto tele e saeu ai mea mo meaai a i'a e matutu , ma se isi apa lapotopoto mo meaai vaia. E mana'omia fo'i se uaea valavala kuaka inisi e fa'anini'i ai mea'ai i'a.

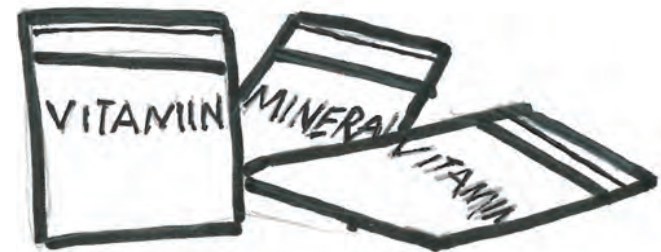
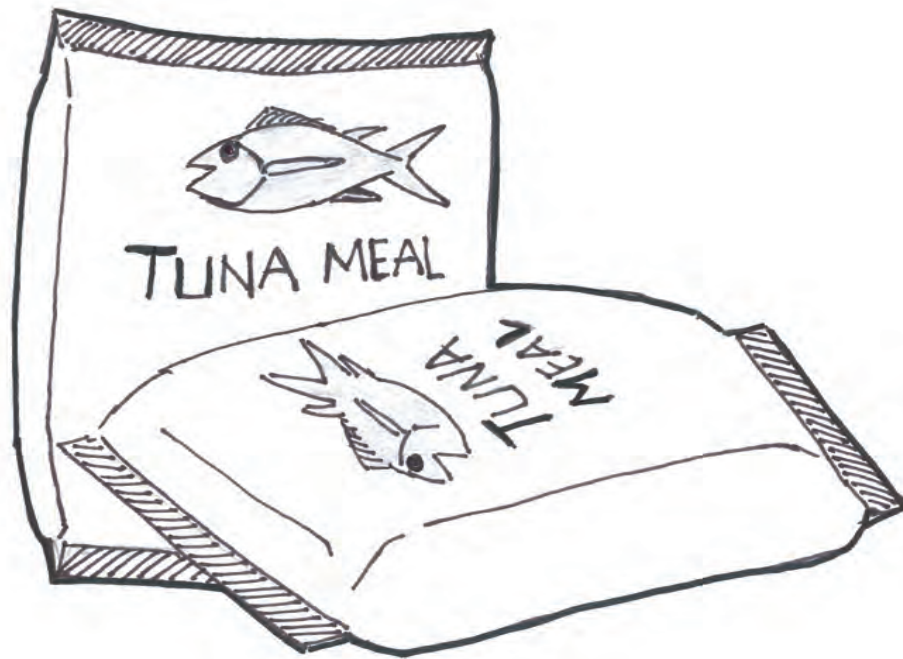
Measure and mix together the dry ingredients in a large bowl.

Fill your soup can with flour and put it in the bowl. Repeat this three more times, so you have a total of four cans of flour in your dry ingredients bowl.



Fua ma saeu fa'atasi meai e matutu.

Fa'atumu lau atigiapa i falaoamata ma sasa'a i totonu o le apa lapotopoto. Ia fa'atolu ona faia lea tulaga, ma e tusa e fa atigiapa falaoamata ua uma ona fua i totonu o le apa lapotopoto o iai meai matutu.



Then, fill your soup can with fishmeal and put it in the same bowl. Repeat this two more times so you have a total of three cans of fishmeal in your dry ingredients bowl. Add one vitamin packet and one mineral packet to the bowl as well.

Ona, fa'atumu fa'atolu lea o lau atigiapa i le pauta i'a ma sasa'a i le apa lapotopoto o lo'o iai mea e fai ai meaa i mo i'a e matutu. Ave lea iai le taga vaitamini ma le taga minerale ma fa'aaoga le sipuni e saeu ai.

Next, mix the wet ingredients together in the other bowl.

You will first need to decide if you want to use bananas, breadfruit, Cassava, or taro as the starch. Maybe one of these grows in your yard and you can use that one?

Once you choose a starch, cook it. Once cooked, mash up enough to fill up your soup can one time and put it into the wet ingredients bowl. Then, fill your soup can two times with water, add to the same bowl, and mix it together with the starch.



Talo
Taro



Manioka
Cassava



Ulu
Breadfruit



Fa'i
Banana

Ona soso'o ai lea, ona saeu ia mea e fai ai meaai a i'a e vaia i se isi apapototo.

E muamua ona e filifili po o le a le fa'aeleeleaga e fai ma masoa, o le fa'i, ulu, umala, po o le talo. Atonu o le fa'aeleeleaga e ola i lou tafa fale, o lena, o le a e fa'aaogaina.

Afai loa ua mautu lou mafaufau i lau masoa e fa'aaoga, fa'avela loa. A vela loa, ona vau lea o le masoa ina ia mafai ona tumu ai lau atigiapa e fa'atasi ma sasa'a i le apa lapototo o iai mea e fai ai meaai a i'a vaia. Ona toe fa'atumu lea o lau atigiapa i le vai, e fa'atasi, ona sasa'a loa i le apa lava lea ma saeu fa'atasi ma le masoa.



Now you are ready to mix the wet and dry ingredients together!

Pour the wet ingredients mixture into the dry ingredients bowl. Use both of your hands to mix the ingredients inside the bowl and make dough. Once the dough feels crumbly, you are ready to add in the final ingredient...

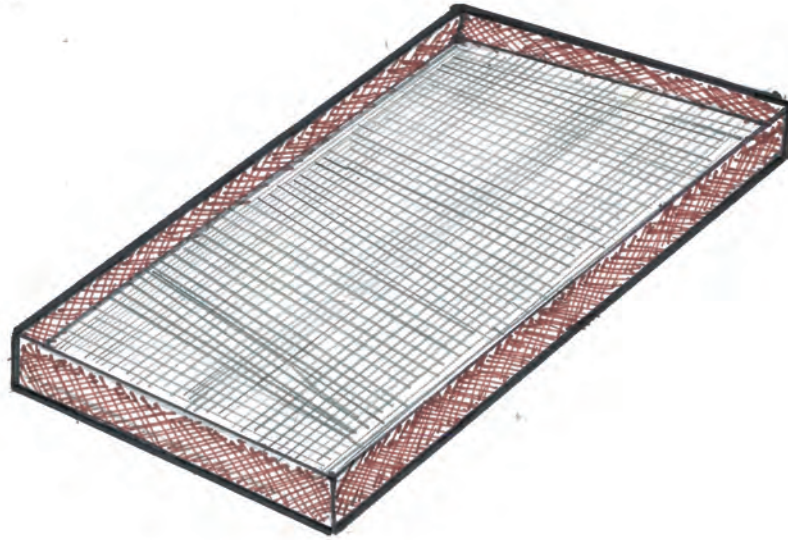
O lea ua e sauni e saeu fa'atasi mea e fai ai meaai a i'a, o le apa e iai meaai e vaia ma le apa o iai meaai matutu!

Sasa'a meaai Vaia i totonu o le apa lapotopoto o iai meaai matutu. Fa'aaoga uma ou lima ia saeu meaai ma maua le potoi. A manutinuti le potoi, ua tatau loa ona ave iai le toega mulimuli o le paluga...



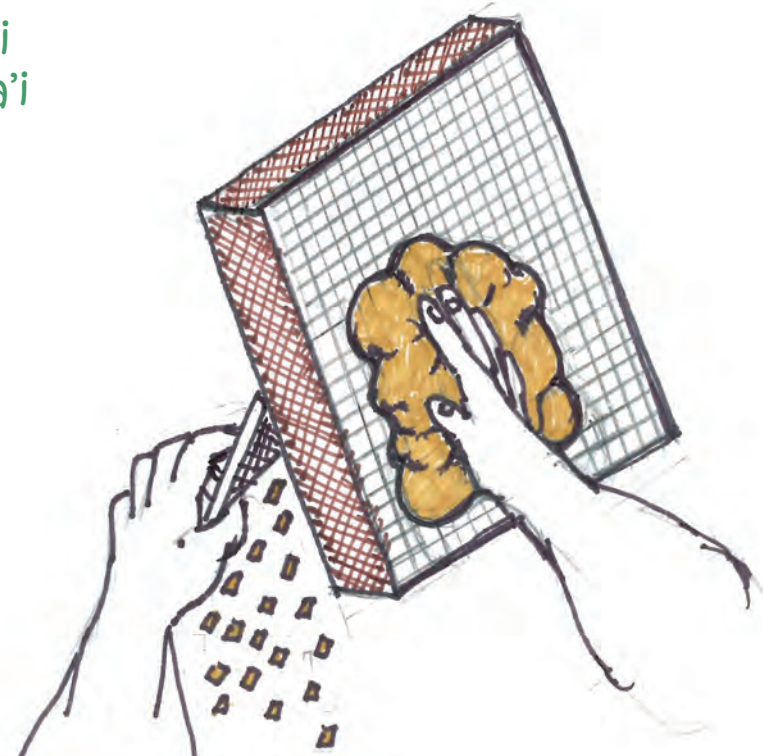
Pour five spoonfuls of oil on the dough and use your hands to blend it in. Make sure you use your strength to mix it really well!

ʻAve iai ni sipuni ga’o se lima, ona sasa’a lea i le potoi ma fa’aaoga ou lima e Vau fa’atasi ai!



Once the dough is well-mixed, tear off little pieces and roll them into small balls (about 2-3 inches). One by one, place the balls on a mesh screen and use your thumb to push the dough from one side of the screen through to the other. Once the dough is pushed through, use your hands to scrape the little pieces of dough from the screen. These little pieces, called pellets, are the fish food!

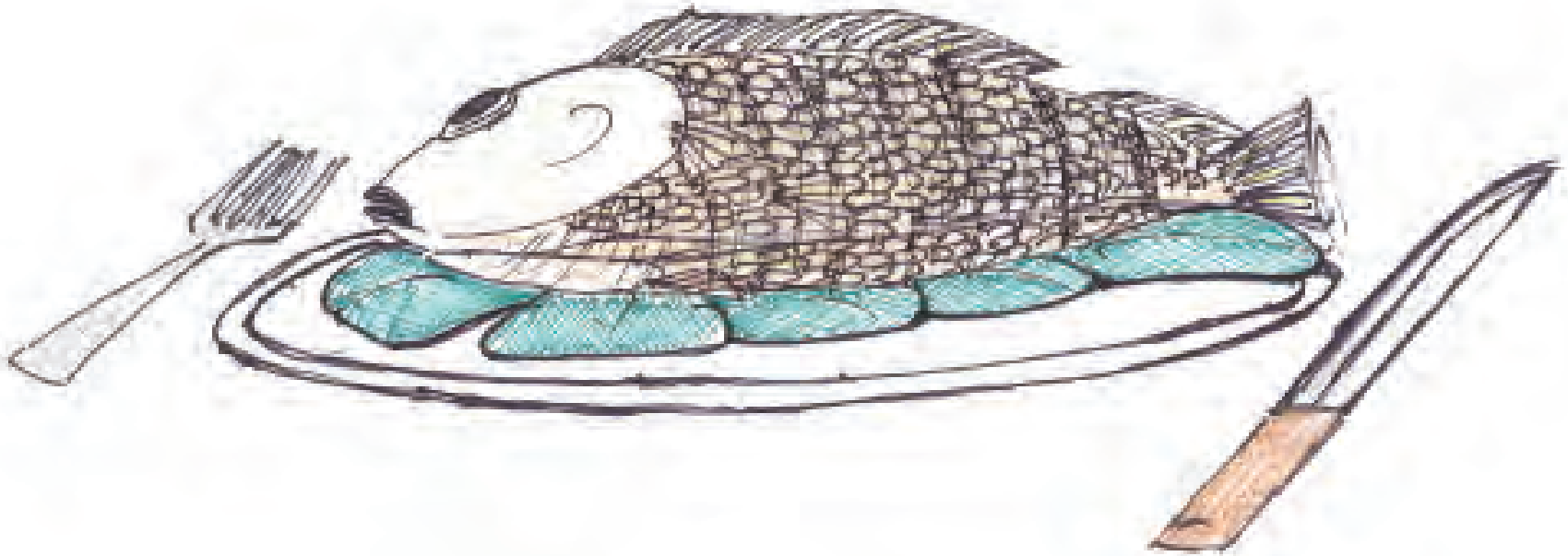
E tau loa le vau o le potoi, fatifati ese fasi falaoa ma mili fa'alapotopoto e pei ni tama'i polo (pe a ma le 2-3 inisi le tele). Ia ta'itasi ona tu'u ia tama'i polo i luga o se uaea ma fa'aaoga lou tamatama'i lima matua e tulei ese mai ai ia polo mai le isi itu o le uaea i le isi itu. Afai ua uma ona fa'ataunu'u lea tulaga, fa'aaoga ou lima e valuvalu ese ai momoi falaoamata o totoe!



Place your pellets on a plate and put them somewhere sunny so they can become dry. After a day, they should be dry enough. Put them into a feed bag and use them to feed your fish every day.

Tu'u momoi potoi po o tama'i polo i luga o se ipu ma fa'ala ina ia mamago. A uma le aso, ua mamago lelei, ona tu'u lea i totonu o se taga e mafai ona fafaga ai i'a i aso uma.





Soon enough, your fish will grow big enough for you to eat. Eating nutritious fish is a great way to help you grow too!

Ūa latalata lava ona tetele au i'a ma mafai ona e fa'aaogaina!

Tilapia Feed Recipe

4 cans flour
3 cans fishmeal
1 can starch
2 cans water
5 spoonfuls cooking oil
1 Vitamin Packet
1 Mineral Packet

- Put 4 cans of flour, 3 cans of fishmeal, 1 vitamin packet, and 1 mineral packet in a bowl.
- In a separate bowl, combine 1 can of cooked, mashed starch with 2 cans of water.
- Mix wet and dry ingredients together until they become a crumbly dough.
- Add 5 spoonfuls of oil to dough and mix well.
- Tear off and roll little pieces of dough into small balls. Push balls through mesh screen to make pellets. Place pellets on plate under sun to dry.

Using an 18.5 oz. soup can, this recipe yields 2-2.3 kg. (7 cans) of dry pellets, depending on moisture content of starch source.