

FOOTSTEPS

No.8 SEPTEMBER 1991

MOTHER AND CHILD CARE

Traditional ways of preparing food

There is a lot to be learned from previous generations, as *Professor Andrew Tomkins* explains...

1 Fermented foods

It appears that for centuries people have been using fermentation in the preparation of cereals. Fermented maize (*kenkey*) is widely used in Ghana and other foods are used throughout Africa. Fermented legumes are often used in Indonesia and other Asian countries. The advantage of the fermentation process is that naturally occurring bacteria cause a simple chemical process which makes the food slightly more acid. This improves the taste and also has the advantage that diarrhoea-causing germs cannot grow so easily in the fermented food.

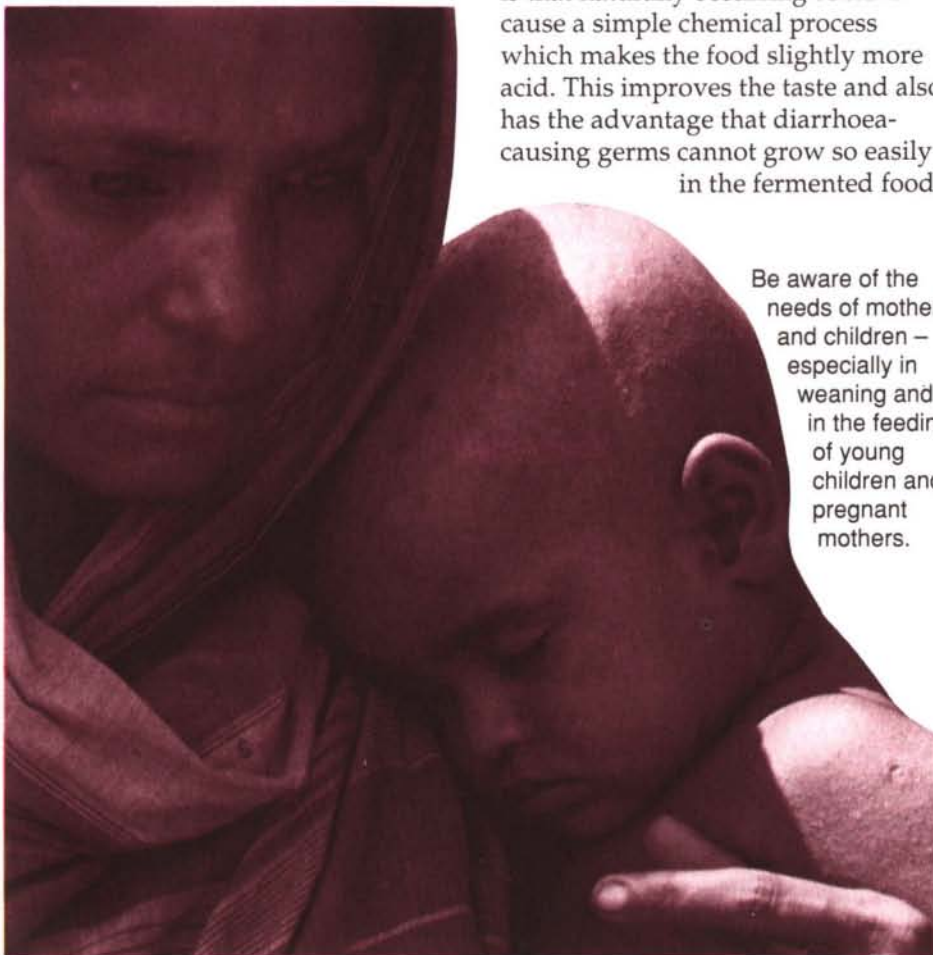
Be aware of the needs of mothers and children – especially in weaning and in the feeding of young children and pregnant mothers.

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When food is stored in warm conditions germs multiply in the food, increasing the risk of diarrhoea. Because of lack of time and fuel, mothers are usually not able to prepare fresh food throughout the day, especially for feeding young children who need several meals a day. Food is usually stored for up to a day – allowing germs to multiply.

In a recent study in Ghana, it was found that the number of diarrhoea causing organisms in food prepared using fermentation was **less than half** that in food which had been prepared freshly and then left lying around. The fermentation process also breaks down some of the fibre in the food and increases the absorption of iron. Most people prefer the taste of fermented food. It is important to recognise that the fermentation



FOOTSTEPS

Footsteps is a quarterly paper linking health and development workers worldwide. Tear Fund, publisher of Footsteps, hopes that it will provide the stimulus of new ideas and enthusiasm. It is a way of encouraging Christians of all nations as they work together towards creating wholeness in our communities.

Footsteps is free of charge to individuals working to promote health and development. It is available in English, French and Spanish.

Readers are invited to contribute views, articles, letters and photos.

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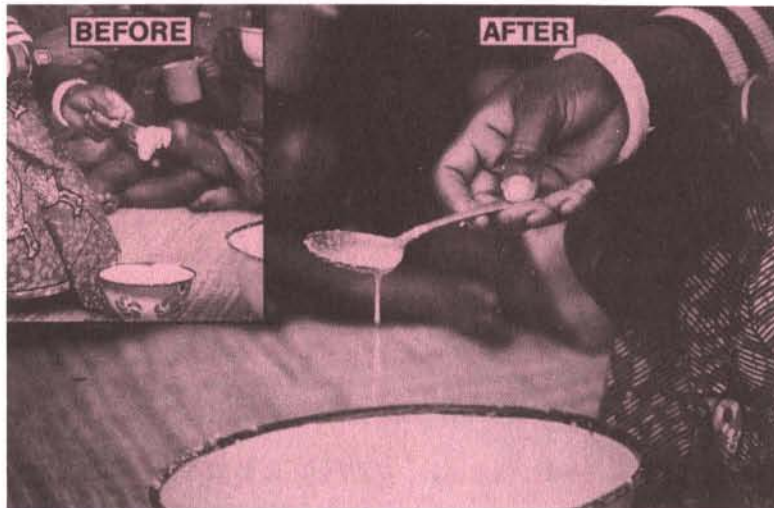
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The same porridge shown both before the addition of germinated flour (inset), and a few minutes afterwards (main picture).

(Photo: Ulf Svanberg, Wilbald Lorri)

process that is traditionally used only lasts 48 hours. This is enough to allow the chemical process to develop, but **not** enough to allow the development of alcohol.

Why have people stopped using fermented food? A recent study in Kenya suggests that health-workers tend to feel that fermented foods are traditional and therefore not "modern" and should be discouraged. Recent research suggests the opposite; old technologies may be very useful for improving the bacterial quality of foods prepared in unhygienic conditions. Obviously, if one was fortunate enough to live in a community where the water was completely pure and the food was uncontaminated, there would be no need for fermentation. However, it seems as though a traditional technology which has been used for improving food hygiene over the centuries, is in danger of being thrown out as a response to too much enthusiasm about modern things.

DISCUSSION POINT

Do people in your area use fermented food? What do mothers think about using this food for young children? Are there any steps you could take to encourage its use?

2 Germinated flours – or 'Power Flour'

Germination is also receiving considerable attention. Dietary bulk is a major problem for children who have to rely on cereals for their main energy and protein source. Young children often find it difficult to chew

and swallow thick porridge. Mothers may add more liquid to porridge and other foods to feed to young children. This means that the child eats less food and more water, and may not receive enough energy for healthy growth. The use of germinated flour can bring a dramatic improvement.

Grains can be germinated by leaving them in water for a day. During the sprouting process, they develop high concentrations of amylase. It has been known for years that amylase can break down the starches into sugars. Thus, germinated foods are more attractive because of their sweet taste. The flour can then be dried, ground up and stored.

MAKING POWER FLOUR...

Soak cereal grains (maize, rice, millet) for up to one day in a covered pot or bucket. Legumes such as mung beans, haricot beans and cowpeas can also be germinated. They need longer soaking – up to two days. Dry the grains well in the sun.

*(If sorghum is the main cereal, this can also be used to make power flour **but it must be cooked for a few minutes after adding to porridge**).*

Mill as usual for ordinary grains. A high protein flour can be made from cereal grains on their own, or from one of the following legume and cereal mixes...

1 part legume : 3 parts cereal

1 part legume : 2 parts cereal

Store in dry conditions.

Power flour is easy to make and can have a dramatic improvement on the diets of young children. In some

countries it is produced commercially, eg: Tanzania, where it is known as Kimea, and India where it is known as ARF (amylase-rich flour).

If this flour is not available in your area, try producing it yourself. If clinics and health workers are encouraging mothers to use this flour, women's groups could produce the flour for sale in small quantities. **Experiment with different grains and legume mixes and let us know the results.**

A small teaspoonful of this flour, when added to a bowl of thick porridge made up from ungerminated flour, (without further cooking) will cause a great reduction in the thickness, making it much more like a soup. This is much easier to feed to children, especially those who are sick for any reason. There are various approaches to using germinated foods and it would be interesting to hear from readers about their experiences.

3 Cereal-based oral rehydration solution

It is now well known that death from acute diarrhoea can be avoided by effective oral rehydration. A lot of emphasis was given initially to the use of special packets of glucose and electrolytes as prepared by WHO and UNICEF. These are good, but there has been even more interest raised in the use of cereal-based oral rehydration. This is a technology which has been around for centuries.

MAKING THE SOLUTION...

Use a small quantity (about 25 to 50 gms) of whatever cereal or flour is available – rice, potatoes, maize, etc. Add about a litre of water, mash thoroughly and boil, stirring to prevent lumps. Salt can be added in the right amount – a level teaspoon would do – and when the solution is cooled it can be given immediately.

During the cooking there is a breakdown of the starches into small molecules of sugar-like substances. These are then broken down by the intestinal cells into sugars. The presence of sugars in the intestine stimulates the absorption of salt and

water into the body and there is rapid rehydration. The advantage of cereal-based oral rehydration over packets is that the presence of starch-breakdown products appears to decrease the stool volume, as well as stimulate the absorption of sodium and water.

A variety of cereals and other substances have been used including rice, maize, wheat, plantain, potato and carrots. It would be interesting to hear from people who have experience with different food substances. It is important to find out exactly how much of the cereal you

need to make a liquid oral rehydration in your own community. Try it and see!

Professor Andrew Tomkins has recently been appointed as head of the new Centre for International Child Health at the Institute of Child Health, Guildford St, London. Information on these and other aspects of maternal and child health is held in the Resource Centre which also contains a display of TALC materials. Visitors are always welcome.



FROM THE EDITOR

MOST HEALTH WORKERS would agree that working with mothers and children is the most important part of health work in a community. This is because the health needs of mothers and children are especially great and because mothers with children make up over half the population. In this issue we can only look at a few of the many subjects concerning mother and child health. But we hope that this issue will bring some helpful new ideas to discuss and try out. Let us know of other subjects you would like to hear about in future issues.

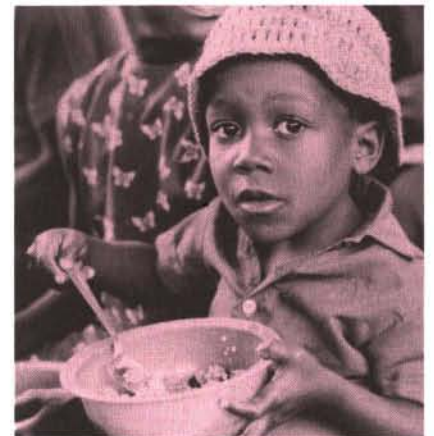
Mothers who have poor nutrition in pregnancy give birth to small babies. Small babies grow less well. Late weaning and poor nutrition for youngsters can lead to malnutrition, disease, and stunting in growth, both mentally and physically. This poor start in life can never be repaired.

Jesus always had compassion for the needs of others. As Christians

we need to share his love with those who need our support. Be aware of the needs of mothers and children in your area. Whatever our work, whether directly in health or in agriculture and other areas, we need to work together to break the cycle of undernutrition and disease for mothers and children.

Future issues of *Footsteps* will look in particular at sanitation and small livestock. Please let us know if you have ideas to share on these subjects. Thank you for all the many encouragements received from those of you who have written in with your thanks and appreciation for *Footsteps*.

Isabel Carter



A Deadly Disease

by Sue Hanley

ANGONG WAS EXPECTING her third baby. After a good pregnancy she was eagerly awaiting the birth. The birth pains began while she was collecting water. She returned home and prepared for the birth. There were two or three women in her village who helped at the birth of babies, so a message was sent to one of them to come and assist.

That night Angong gave birth to a lovely baby boy. The cord had been cut with a knife which she used every day for different chores and then cow dung was put on the cord.

The baby was beautiful and was very contented. However, on the third day Angong noticed that he would not suck and his mouth was stiff and tight. As the day went on, he became more sick, his whole body becoming stiff and shaking. They tried to give him milk on a spoon but every time they touched him, he began to shake and become stiff. The baby got rapidly worse and later that week he died. He died of a disease called **tetanus**.

QUESTIONS TO DISCUSS

- 1 Does this disease occur in your community?
- 2 Why do you think babies die of this disease?
- 3 What can you do about it?

This disease gets into the baby through the cord, either when it is cut by something that is not clean or when something (eg manure) is put onto the cord which contains the tetanus germ.

There are two ways that you can stop this happening:

1 VACCINATION

The pregnant mother can be vaccinated with two or three doses of tetanus toxoid, at intervals of one month or more, completing at least a

month before the expected birth date. If the mother has been immunised against tetanus before this pregnancy, only one dose is necessary.

2 KEEP THE CORD CLEAN

The cord **must** be cut with something sterile and kept clean. A kit can be given – or sold for a small fee – to each mother. This kit would contain the following items in a small box or plastic bag...



Soap for the person assisting with the birth to wash her hands with.



Clean cotton tape to tie the cord.

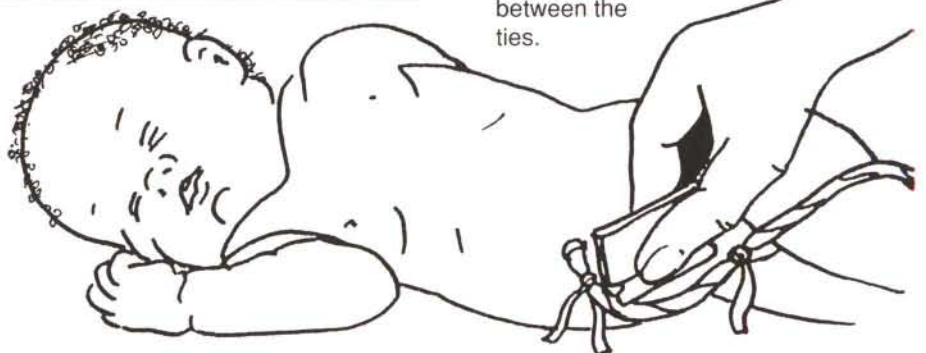


A new unused razor blade to cut the cord. Local alternatives (eg a split sorghum stalk) may be used if these are first sterilised and then kept clean.



A tiny bottle of gentian violet to put on the cord with cotton wool to help it dry.

Sue Hanley has worked as a midwife in both Sudan and Kenya where this kit has been used successfully.



BIBLE STUDY



by Peter Batchelor

Our responsibility to our neighbours

What do the following passages teach about loving our neighbour in a practical way?

Exodus 23:10–11

2 Corinthians 8:8–15

Acts 4:32

What does this mean for us in our own lives today – and for us as a community?

Different Christians are given different gifts by God's Holy Spirit. Which gift or gifts do you feel are usually seen in a good Christian health worker or motivator? See 1 Corinthians 12:27–31.

In what ways do the following verses help us to keep our priorities right in the work we do?

1 Corinthians 10:31

Colossians 3:17

Peter Batchelor is a consultant with RURCON

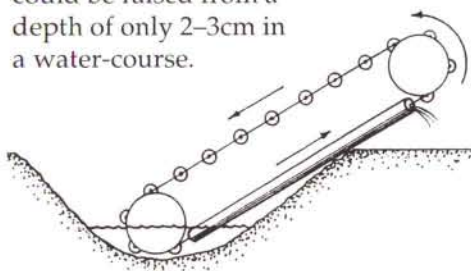
After birth, wait until the cord becomes thin and white. Tie the cord near to the baby and then tie it again 1–2 cms away. Use the new razor blade to cut between the ties.



A better pump?

While studying the diagram of the water-lifting device (the rope-washer pump) in your last issue, I was struck by the idea of a very simple modification.

The problem is that, to work, the pump would need between 70–100cm of water. This depth of water may not always be available. If the direction of the drive is reversed and the pipe put on the bottom, instead of the top, water could be raised from a depth of only 2–3cm in a water-course.



Rod Mill, UK

Robert Lambert replies:

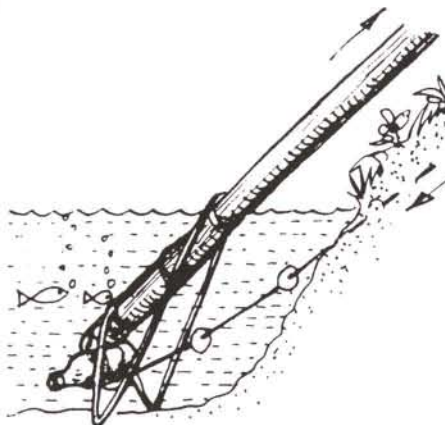
This raises a good point. I can see no reason why this would not work. However, the advantage of being able to pump from shallower water may not be so great, as the present system will allow water under 10 cm to be collected. Usually, when there is so little water left in a well, it is better to wait for the well to recharge. Another advantage with this suggestion is that the returning rope would be free of obstacles, reducing wear.

But the disadvantages would be that the pipe outlet would be lower, making collection, and particularly distribution, of the water more difficult. If, to compensate for this, the pump axle is raised, it would be more difficult to turn the handle, unless a platform (which women might be unwilling to mount) was used.

I will suggest the idea to pump-makers and trainers. We will see how they respond.

Robert A Lambert

The diagram of the pump in Issue No.7 included a complicated support in the water. In fact, a simple support of bent wire with a glass bottle acting as a non-rotating pulley is quite effective.

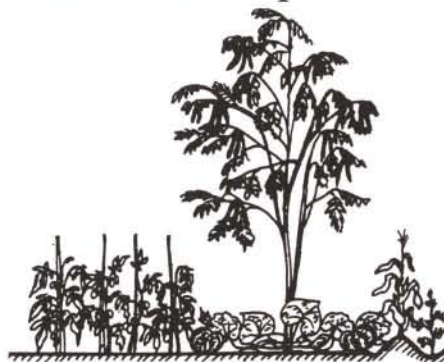


Handling skills

Thank you for sending *Footsteps*. I have gained a lot, especially on the side of agriculture, Bible Study and health education. Since the magazine is dealing with community, I have obtained a lot of skill on how I can handle them, both in meetings and groups. So I ask you to keep sending it to me. I was also very glad when I saw the photo of our tree nursery. (*Footsteps* No.5)

Koileken ole Santeto, Narok, Kenya

Demonstration plots



Firstly let me say how much I appreciate *Footsteps* magazine. I hope there is no copyright on the material, as we are currently producing a series of simple booklets in Creole, and many of the articles and illustrations are being translated for this purpose.

Last year, plans were made to establish projects in four centres to stimulate agricultural development. These included church demonstration plots where vegetables would be grown between fruit trees, firewood and timber-producing trees. However, we were advised that demonstration plots were usually not a good idea and so they were dropped from the plans.

My colleagues and I were therefore a little surprised to read Dr Julian Evan's statement in *Footsteps* No.5: "Nothing succeeds like success and good demonstration plots can stimulate enquiries and interest."

Do other readers have strong feelings on this subject? We would be very interested to hear about other experiences.

Ian Wallace, IEGB, Guinea Bissau

Jerry Adams (Tear Fund) replies:

Demonstration plots can often seem very remote from local farmers. They often assume that farmers will be able to copy all their experiments – for example using hybrid varieties with the necessary fertiliser and chemicals. It is much more realistic to have small plots on the farmer's own land. In West Africa there have been a number of studies looking at how farmers themselves experiment using different varieties and methods on their own land. It seems likely that it would be much better to encourage this process than set up separate demonstration plots.

Jerry Adams

The Editor adds:

This has also been our experience. Church or project-based demonstration plots may well attract interest but, if they are successful, people say: "That's all very well, but they have more... time, money, fertiliser, water, better seed, etc. It wouldn't work on my land." A poor demonstration plot is a disaster and may do great harm in losing people's confidence and interest in any new ideas. Making sure that demonstration plots are always looking good may use up a lot of time, which might be better spent with local farmers.

What do other readers think?

Protect yourself and your clients

Take care of your hands



Wash your hands thoroughly with soap and water before and immediately after touching blood, semen or vaginal fluid – even if you were wearing gloves.

Wear gloves on both hands whenever you touch blood, semen or vaginal fluid.



Use a sterile pair of gloves for each client. Good quality gloves can be sterilized. Before re-use they can be filled with water to check for damage.

Take care to cover any sores, cuts or rashes on your hands and arms with waterproof plasters.



Disinfect surfaces and bedding



Wipe surfaces with one of the chemicals which kill HIV if there are spills of blood and fluid, and at the end of the day.

Cover blood and vomit spillages with one of these chemicals (see box). If possible leave for a few minutes first and then clean up, wearing gloves. Burn cleaning materials or disinfect them.



Soiled bedding and linen should be boiled before handwashing. Gloves, if available, should be used if the bedding is badly soiled.

You can protect yourself and your clients from infection by always following these correct procedures – every hour, every day, with every client.

Follow the infection control rules every hour, every day, every client.

These pages have been adapted from an excellent wallchart produced by the IPPF AIDS Prevention Unit. It is printed on tough plastic and contains more information than we can include here. See page 8 for details. We are grateful to IPPF for permission to include this material.

Advice to Care Givers

The HIV virus which causes AIDS, is found in the blood, semen, vaginal fluid and other body fluids of infected people. A person may carry these germs without knowing it, and without showing any symptoms. If any of these infected fluids touch the broken skin, or mucous membrane (for example: the eyes, mouth, nose etc) of another person, he or she may also become infected.



Chemicals which will kill the HIV virus:

- | | |
|------------------------|----------------------|
| Glutaraldehyde 2% | Rubbing alcohol 70% |
| Polyvidone iodine 2% | Surgical spirit 70% |
| Chlorine solution 0.5% | Hydrogen peroxide 6% |

Disinfectants such as Lysol, Savlon and Dettol will **not** kill the HIV virus. Always cover sterilised instruments until you use them to avoid contamination.

Dispose of waste safely

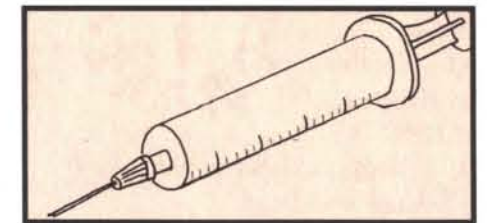
Place disposable needles carefully into a separate, labelled, closed container immediately after use. Burn or bury the container daily.

Burn all soiled waste as quickly as possible (use an old oil drum as an incinerator).



Take care with needles

Take great care with needles and other medical instruments. If you have an accident allow the wound to bleed freely for a few minutes. Wash the wound with soap and running water and cover with a dressing. Needles should not be used more than once (unless properly sterilised).



Sterilise instruments and syringes

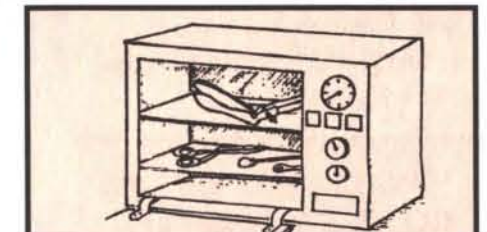
The HIV virus can be passed from one person to another through contaminated instruments and needles.

Always sterilise instruments and reusable needles after each use following these steps:

Place instruments in a 0.5% chlorine solution (or use dilution recommended on bleach container) after use to prevent fluids from becoming dry and difficult to remove.

Wash well with a brush and soapy water. Use one of these methods to sterilise:

- **Steam** under pressure for at least 20 minutes.
- **Heat** in an electric oven for 2 hours at 170°C (340°F).
- **Boil** in water for 20 minutes. Make sure that the instruments are covered with water at a rolling boil with the lid on.
- **Soak** in one of the chemicals listed for 30 minutes. Check to find the local brand names and dilutions. (This method is **not** suitable for sterilising needles and syringes.)



Helping Health Workers Learn

by David Werner and Bill Bower

632 pages

ISBN 0-942364

This lengthy paperback book is packed full of ideas, methods and aids for anyone involved with the training of health workers. It is very practical, using only simple materials for teaching aids. There is a great understanding of the need to build on traditional beliefs. It is a book that no-one working with health workers should be without. It is written by the author of "Where there is no Doctor". Very highly recommended.

Available in English and Spanish from TALC

£6.75 (including postage)

Happy Healthy Children

by Janie Hampton

Macmillan Publishers, 142 pages

ISBN 0-333-39030-X

A simply written book, useful for school teachers and health workers. It contains information on the care of babies and young children, weaning foods, malnutrition, hygiene, diseases, prevention of accidents, simple games, and patterns for clothes. In addition, there is information on reproduction and family planning, disabilities and the dangers of smoking, drinking and drugs.

Available in French and English from TALC

£3.25 (including postage)

Better Child Care

Edited by Sr M A Tregoning and Dr G S Bova

Macmillan Publishers, 64 pages

ISBN 0-333-39305

A simply written book containing all the important facts on better child care. Each page contains large photographs – taken in Ghana – to illustrate the point. A useful resource for health workers.

Available from TALC

£1.10 (including postage)

Training Manual for Traditional Birth Attendants

Compiled by Gill Gordon

This practical book is full of ideas, information and facts. Very useful for anyone working with, or training traditional birth attendants.

Available from TALC

£6.20 (including postage)

Flannelgraph – Nutrition and Child Health

This flannelgraph contains seven large sheets of flannel, each with ten to fifteen illustrations to cut out and use. The drawings, which are African based, cover all aspects of nutrition and child care – weaning, hygiene, diarrhoea, good food, food preparation, welfare clinic, growth charts and measles. In addition, there are detailed sheets with information on all these subjects and ideas of how to use the flannelgraph.

Though expensive, this is an excellent resource, providing teaching aids for a whole variety of subjects. Particularly useful for those involved in teaching nutrition, health and development at village level.

Available from TALC

£26.65 (including postage)

How to choose and make a cold box

by AHRTAG

79 pages

ISBN 0 907320 09 0

A detailed manual on the design and building of simple cold boxes for storing vaccines. It contains information on all the points to consider before either buying or making a cold box.

Details of many cold boxes available around the world are given. Some of the designs are very simple and easily made. Others require skills in carpentry and metal work. A useful manual.

Available from TALC

£3.90 (including postage)

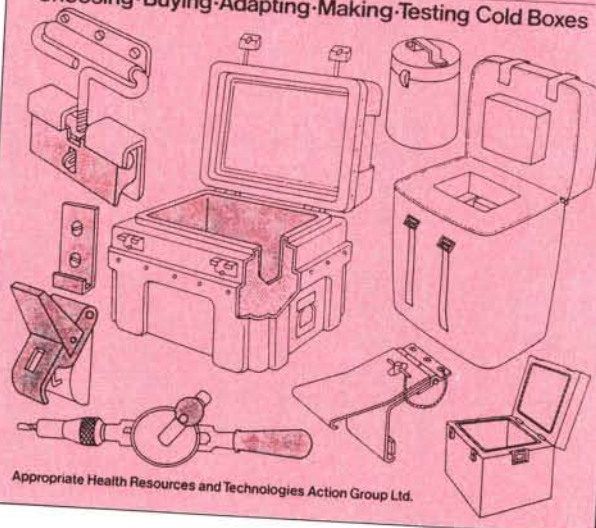
Better Child Care

Edited by Sr M A Tregoning and Dr G S Bova



How to choose and make a cold box

Choosing · Buying · Adapting · Making · Testing Cold Boxes



Appropriate Health Resources and Technologies Action Group Ltd.

Most of the above resources are available from TALC (Teaching Aids at Low Cost) who stock many other books dealing with mother and child care. Write for a full list of the resources they provide.

TALC
P O Box 49
St Albans
Herts
AL1 4AX
United Kingdom

CLEFT GRAFTING FOR MANGOES AND AVOCADOS

by Mike and Isabel Carter

IN *FOOTSTEPS NO 5* the advantages of bud grafting citrus trees were discussed. These include:

- reduced height for easy picking
- good quality fruit from selected varieties
- early fruiting after only a few years.

However, with other kinds of fruit trees it can be difficult to achieve successful bud grafts.

There is another method of grafting which you can try on trees such as mangoes and avocados, which will bring the same benefits. It is known as cleft grafting. (You should always try bud grafting first, since even if it fails, less damage is done to the seedling tree).

Raising rootstocks

Choose healthy seeds from trees which grow well in your area. Pick fruit from the tree rather than from off the ground. Both mango and avocado seed should be fresh and not dried. Mango seed can be placed in a bucket of water first – poor seeds will float and can be thrown away. Plant seed in large plastic tree bags or tins with holes in the base.

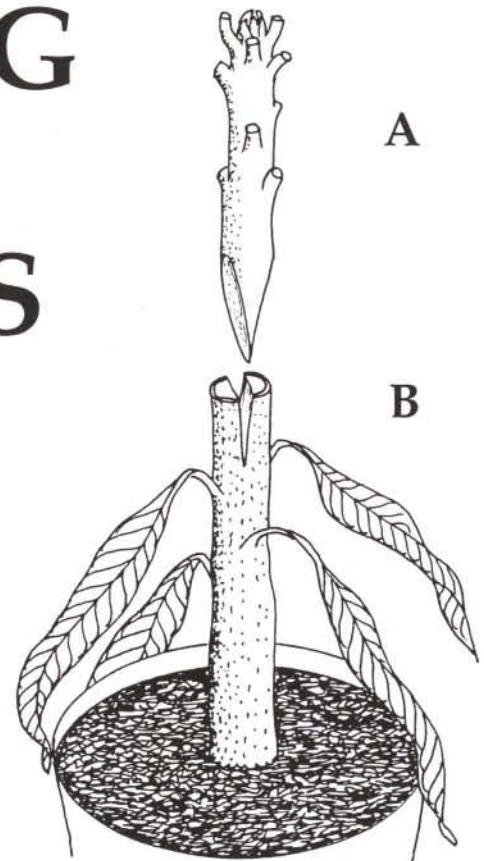
Allow a single stem to grow for six to eight months. When it is as thick as your little finger, it is ready for cleft grafting. (As you become more skilled you can try grafting younger seedlings.)

How to do cleft grafting

- 1 Select and prepare your budstick. From the ends of branches on an excellent mother tree, choose

budsticks that are not yet sprouting but with fat buds. Cut them about 15cm long. Remove all the leaves carefully. The cut budstick should be the same thickness as the rootstock stem.

- 2 With a very sharp knife cut the bottom of the budstick with two sloping cuts 3 1/2 cm long (A).
- 3 Cut off the top of the rootstock about 30cm above the soil. Make one straight cut about 3cm deep in the top of the rootstock (B).
- 4 Push the budstick firmly into the rootstock cut. Leave 1/2 cm of the cut budstick outside the rootstock as shown.
- 5 Use clear plastic tape (or cut up plastic bags) to wrap firmly around the graft. Do not remove the tape until the budstick begins to grow –



showing the graft has been successful. Remove any buds which grow below the graft.

If the graft dies, you must allow one bud to grow below the graft and wait several months until you can try again.

Practise cleft grafting on small branches of a mango tree before trying it on young mango or avocado seedlings. Plant the young trees in large holes with plenty of manure or compost.

Let us know how you get on!

Trees for Life – a wall-chart for Africa

A NEW WALL CHART is being distributed free to groups in Africa. Designed to help in agroforestry training, it shows a cross section of African landscape. It could be used in schools or with farmers' groups. It shows the gradual reduction of the forest, moving from the top of a hillside covered with thick forest, down past a farm with contoured terraces, shrub fences and windbreaks. Beyond this ideal scene there are bare hills with no trees, erosion, dead cattle and – finally – desert.

Around the main picture are many small illustrations showing trees and methods of planting, heat conserving stoves and wooden farm implements. The chart measures 75 x 100cm and has a plastic coating.

Write, explaining your work, and requesting a copy to:

Mr Paul Caton, The Tree Trust, Wellspring Cottage, Deerfold, Linger, Bucknell, Shropshire, SY7 0EE, UK.

Adapted from DCFRN News.

Traditional beliefs and health problems

by Sandra Michie RGN RM

WHEN WE MOVE into a different cultural situation and begin to understand people's beliefs in health or other areas, we often face difficulties in teaching new ideas.

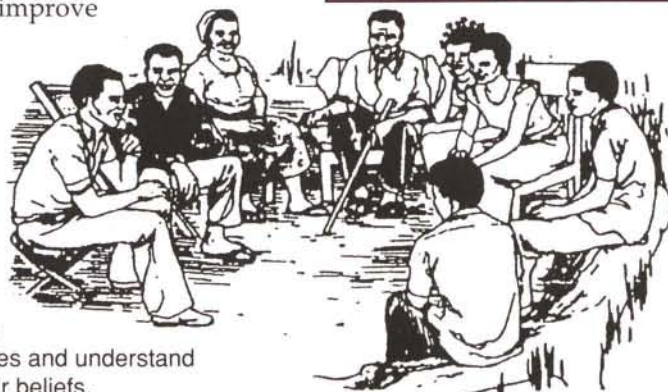
Perhaps one of the first principles to remember is that there is much good in every culture, and simply because something is different from our ways it is not necessarily wrong. We need to understand people's beliefs thoroughly and then to build upon them to bring meaningful change.

Cultural beliefs can be divided into...

- helpful
- harmful
- neither helpful nor harmful

Take time to assess each belief with these criteria. This can be very helpful in working out our response to that belief and the actions resulting from it. We need to work from where the people are – from the very basis of their beliefs and traditions. It may take many months, even years, to understand what lies behind some beliefs, but without this understanding it may be impossible to improve the whole situation.

Sit and take time to talk with people of all ages and understand the basis of their beliefs.



CASE STUDY

IN THE AREA OF ZAMBIA in which I worked, there was the belief that if a mother became pregnant again before the previous baby was actually walking, then the breastmilk turned bad and the first baby would die. This resulted in a cultural taboo on sex for the mother before that child was walking, and also a speedy weaning of such a child if the mother should become pregnant. Then the child would weaken and often die, usually due to malnutrition and infection, as a result of poor weaning foods and complete lack of milk intake – so the belief was carried on.

The older women ("grandmothers") encouraged the belief, both because they believed it to be fact, and because they wanted to encourage traditional practices in the younger generation – a weaned child would often go to live with grandmother (which pleased her).

The younger women longed for another view that would "liberate" them – the belief created stress in monogamous marriages and often resulted in infidelity, or the resort to polygamy to fill the gap.

Helpful aspects

- A 21 month gap (or longer) between births was good for the mother's health.
- The baby received the mother's full attention for at least 21 months.
- Breast feeding for over 18 months was very good for the baby.

Harmful aspects

- The mother's fear that her breastmilk would poison the baby
- The fatalistic attitude that the child would die and it would be her fault
- The "justified" infidelity and polygamy.

In this situation, the positive aspects needed to be encouraged without strengthening all that the "grandmothers" said. They were the key people. But the role of the men was important. The younger men were used to recognising the truths learned through education and could have an active role in change. The younger couples were often moving out of the cultural society of their parents (by urbanisation, education, etc). If the men would accept changes, they strongly influenced their wives.

Appropriate responses

- 1 Support of those few mothers who became pregnant before the older child was walking, encouraging them to continue breast feeding as long as possible
- 2 Providing a viable alternative method of family planning
- 3 Health teaching – on the use of locally available weaning foods and the value of breast milk even if a mother became pregnant again – was given:
 - on an individual basis to the distressed mother
 - to all mothers at antenatal clinics and visits
 - in the home environment and in ways and language acceptable for the older women
 - to the husband and other men of the community
 - to school children, who often care for their younger siblings and will soon be parents themselves.

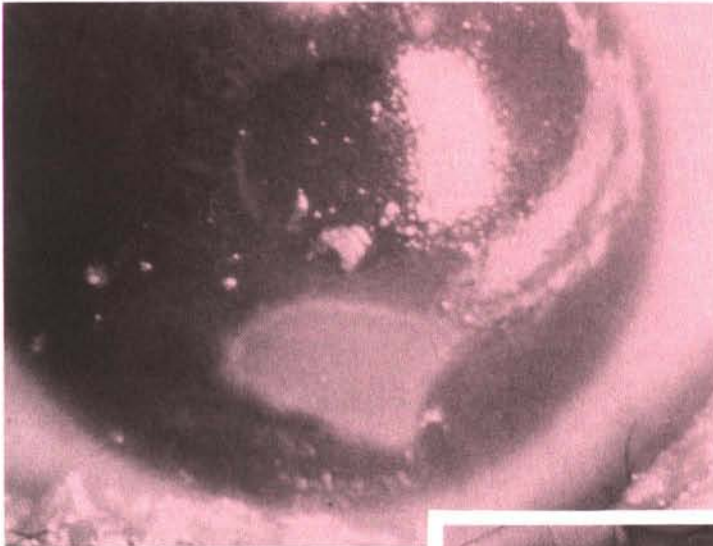
Sandra Michie spent 25 years in rural Zambia with mission medical work, mainly involved in preventative health care.

If traditional beliefs are...

Helpful: Encourage them.

Harmful: Identify the root of the problem. Seek some non-offensive means of change. Start from where they are now.

Neither: Ignore them.

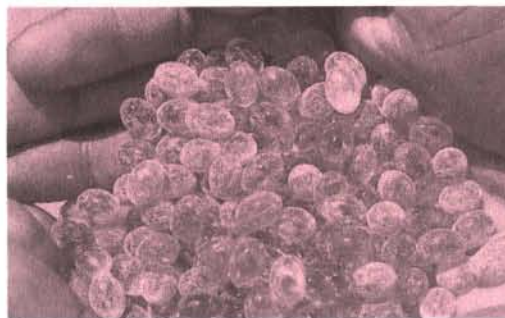


Deficiency of Vitamin A causes small ulcers to develop on the cornea (lens) of the human eye. This photo shows one large ulcer and several small ones. The ulcers may appear pale green.

(Photo: Dr M McGavin)

Each of these capsules contains 200,000 iu of Vitamin A. As well as relieving the corneal ulcers shown above, they can significantly reduce the mortality rate from measles in young children. Just one tablet a day for two days is sufficient.

(Photo: Christoffel Blindenmission)



Whether Vitamin A should be given as capsules (assuming these can be regularly supplied) or whether Vitamin A intake should be increased by greater efforts in encouraging horticulture and good diet (plenty of dark green leafy vegetables) – should be a national or local decision. It will depend on how severe the problem is. The costs of purchasing and distributing capsules also have to be considered.

Give Vitamin A to all children with measles

What is quite clear however, is that children with severe measles do benefit from having a capsule of Vitamin A. Two studies, one in South Africa and one in Tanzania, have shown that childhood mortality from measles can be reduced by about 30% if a capsule of 200,000 iu is given on each of two successive days. In fact, WHO recommends that this should be the routine management of measles where there is obvious Vitamin A deficiency or where the proportion of children dying from episodes of measles exceeds 1%. We will try and keep you informed as it becomes clearer on what to do about Vitamin A in the general community.

UPDATE ON VITAMIN A

by Professor Andrew Tomkins

It has been known for many years that Vitamin A deficiency can cause blindness. In the early stages, the individual complains of not being able to see well at night (night blindness). As the deficiency develops, the lining of the eye becomes dry and cloudy. Eventually, small ulcers may develop and unless vitamin A is taken quickly, the eye is permanently damaged. Vitamin A deficiency is often brought about by illness, particularly diarrhoea and measles, and is especially likely to occur in severely malnourished children. Fortunately, urgent treatment with a capsule containing 200,000 iu of Vitamin A taken by mouth will clear the problem up quickly.

Varying results

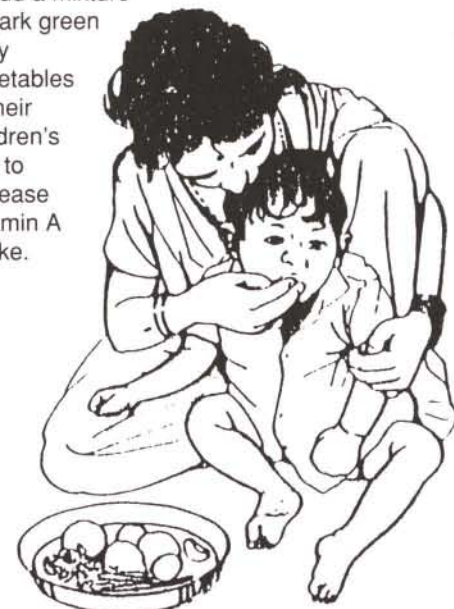
It is also realised that Vitamin A affects the ability of the body to fight infection (it may influence the strength of the lining of the intestinal and respiratory tract). People have become more interested in the potentially important effect of Vitamin A on the immune response of the body to infection.

There have been several studies which have shown reduction in mortality, probably from infectious disease, among children who receive 200,000 iu every four to six months. However, there have been some equally well-performed studies which

show that supplementation does not necessarily improve mortality! It may be that different parts of the world have different levels of severity of Vitamin A deficiency, and so what is good for one population may not necessarily be so effective in another.

Increase Vitamin A intake by eating plenty of liver and dark green leafy vegetables

Encourage mothers to add a mixture of dark green leafy vegetables to their children's diet to increase Vitamin A intake.



TRADITIONAL BIRTH ATTENDANTS

by Dr Godwill Assiimwe Okiror

Traditional birth attendants (TBAs) are found in most societies. They are usually older ladies. They conduct over two thirds of the deliveries in the world, yet the majority are illiterate and are not trained in modern medicine.

TBAs in Kaabong Subdistrict (Uganda) conduct over 90% of the deliveries. The area is semi-arid with few inaccessible health units and poor transport services.

So not only do the TBAs conduct deliveries, they also provide care for pregnant women during the ante-natal and post-natal period. They also provide care for the newborn and treat most of the maternal and childhood diseases.

Diagnosis

Pregnancy is usually only diagnosed by noticing enlargement of the abdomen, later in pregnancy. Most are able to determine the position of the baby in the uterus and they will

often attempt to turn a baby lying in a position other than longitudinally. This procedure may lead to separation of the placenta or premature labour.

Nearly all the TBAs are herbalists and will treat problems during pregnancy with herbal preparations. The majority of pregnant women treated go through pregnancy without problems, after being treated with herbal preparations. But the use of herbs indiscriminately, in pregnancy or labour, could be dangerous – particularly to treat vaginal bleeding in late pregnancy (women should be referred for medical help immediately).

Women in Kaabong usually present to TBAs in established labour so there is no time to boil instruments. The majority of TBAs do not wash their hands before conducting a delivery, nor do they clean and sterilise the instruments used to cut the cord.

Training programme

A training programme is now established in Kaabong to work with TBAs. They learn to diagnose early pregnancy and to refer women with babies lying in abnormal positions. They are trained to examine pregnant women for anaemia, by looking at the tongue. The TBAs give pregnant women iron and folic acid tablets routinely.

They learn hygienic practices in delivery – washing hands, using sterile instruments to cut the cord and using boiled water to wash the cord, rather



Many traditional birth attendants advise mothers on child care as well as assisting at deliveries.

than the traditional practice of applying rat faeces, soot or ghee.

Mothers are advised to rest for at least a week after birth. During this time, they are fed on a rich diet of milk and blood which encourages breastmilk. They are encouraged to breastfeed their babies immediately.

TBAs also advise mothers to abstain from sex until the child is crawling. This may be helpful as a form of child spacing, especially in areas like Kaabong where family planning services are only accessible to a few mothers. Mothers are encouraged to take the babies for immunization and they are taught about the use of oral rehydration fluids to treat diarrhoea.

Saving lives

In conclusion, experience in Kaabong shows that TBAs are very willing to be trained and to accept modern ideas in medicine. So let us not despise TBAs. Instead let us work together with them to save the lives of mothers and babies. They can be of great value, particularly in areas where modern health units are inaccessible, if they are given more knowledge through training.

Dr Godwill Assiimwe Okiror has worked for several years training traditional birth attendants in NE Uganda. She has found that they are eager to learn how to improve their service to mothers by adopting simple improvements in hygiene and diagnosis.



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