WN *Columns*

World Nutrition **Volume 6, Number 7-8, July-August 2015**

Journal of the World Public Health Nutrition Association
Published monthly at www.wphna.org/worldnutrition/

What do you think?

Geoffrey Cannon



Spirals relating to news in WN and the world. Left is a recent cloud formation in Nepal. Right is a detail of a sunflower, one of the wonders of nature venerated by St Francis, patron saint of ecology

Rio de Janeiro, Juiz de Fora. We see them here and there and everywhere, when we look – spirals. Above left is a recent cloud formation in Nepal. *WN* editorial team member Ashok Bhurtyal, Dushala Adhikari and colleagues, report in this issue in *Update* from Kathmandu. Above right is the centre of a sunflower, venerated as all creation by St Francis of Assisi, whose ministry inspires Pope Francis.

Francis is 'my hero' in this issue, following his encyclical *Laudate Si',* on climate disruption and much else, including the basic reasons for inequity, poverty and hunger. In response, World Bank president Jim Yong Kim says that over the past 30 years weather-related disasters have killed more than 2.5 million people and resulted in almost $US 4 trillion in damage, and:.

> Pope Francis' first encyclical should serve as a stark reminder to all of us of the intrinsic link between climate change and poverty. We know the scientific, business and economic case for action to combat climate change and I welcome the pope's emphasis on our moral obligation to act. The pope's encyclical comes at a pivotal moment in the lead up to December's Paris meeting on climate change.

This is followed by two stories with related themes. The first reports some more about my Daniel Fast, and proposes that feasting and fasting both have been, still are, and should be, seen as natural. Humans do not live by three meals a day alone. In the second, I explain that yes, I do supplement my diet. But not with pills! Instead I am preparing for a long water-only fast, by fortifying myself with *multimistura*, the Brazilian marvellous 'multimixture', made by hand from dried manioc leaves, powdered eggshell, and… well, read on!



Nourishment

What they believe: 19. Pope Francis Empowering the people, saving the planet



Pope Francis greeting Cuban president Raul Castro at the Vatican (above left), portrayed in street art as a superhero (above right), calling for action on climate disruption (below middle), and on the covers of magazines like Time and Vanity Fair, and (below) also of Rolling Stone – and World Nutrition

Pope Francis is now the world's most powerful moral authority. In the *Forbes* list of the world's most influential people he ranks #4, after the leaders of Russia, the US and China. He eclipses all previous popes in modern times by his direct words and actions, his guts in taking on the biggest issues, and his personal humanity. With 1.2 billion Catholics in the world, and with his homely universally attractive charisma including for those (like me) without belief in a God, he has real impact. Also, at 80 next year, he is an old man in a hurry. If any one person, buoyed by an emerging spirit of the new age ahead, could be our good shepherd, it is Francis.

Francis is the first Pope who is a Jesuit, and the first from Latin America, and from the global South. He is also the first to choose the name Francis, in affinity with Francis of Assisi (1182-1226 CE), explaining: 'He brought to Christianity an idea of poverty against the luxury, pride, vanity of the civil and ecclesiastical powers of the time. He changed history'. Previous popes have frequently emphasised the ministry of Jesus as a champion of the impoverished, but have not acted out this sympathy so vividly as Francis does. He alludes to his frailties and limitations and those of the Church. On homosexuality he says 'Who am I to judge?' Now (Box 1, below) he confronts climate disruption, supported by Jim Yong Kim, president of the World Bank.

Box 1

Laudato Si'.Francis on nature's revenge

Extracted and adapted from articles in the media in the week of 13-19 June 2015

> [The Earth} is protesting for the wrong we are doing to her, because of the irresponsible use and abuse of the goods that God has placed on her. We have grown up to think that we were her owners and dominators, authorised to loot her. The violence that exists in the human heart, wounded by sin, is also manifest in the symptoms of illness that we see in the Earg, the water, the air, and all living things.

With such declarations, Pope Francis now calls for an ethical and economic revolution to prevent catastrophic climate disruption and growing inequality. He does so in his new encyclical *Laudato Si'* (*Praised Be*), in the *officially released version in English.* It is addressed to everybody, not only the world's 1.2 billion Catholics. It is timed to have maximum public impact ahead of the pope's meeting with Barack Obama and his address to the US Congress, and then the UN general assembly, in September. He states that exploitation of the planet's resources has crossed the Earth's natural boundaries, and that the world faces ruin without a revolution in hearts and minds. Hans Joachim Schellnhuber, founder and chairman of the Potsdam Institute for Climate Impact Research, says:

> Within the scientific community, there is almost a code of honour that you will never transgress the red line between pure analysis and moral issues. But we are now in a situation where we have to think about the consequences of our insight for society.

Catholic theologians say the overarching theme of the encyclical is 'integral ecology,' which links care for the environment with the teaching that economic development, to be morally good and just, must take into account people's need for freedom, education and meaningful work. Francis himself told a meeting of social movements last year:

> An economic system centred on the god of money needs to plunder nature to sustain the frenetic rhythm of consumption that is inherent to it... Isn't humanity committing suicide with this indiscriminate and tyrannical use of nature? Safeguard creation, because if we destroy it, it will destroy us. Never forget this.

The encyclical goes much further than strictly environmental concerns. Archbishop Pedro Barreto Jimeno of Peru says:

> Pope Francis has repeatedly stated that the environment is not only an economic or political issue, but is an anthropological and ethical matter. *Laudato Si'* addresses the issue of inequality in distribution of resources and topics such as the wasting of food and the irresponsible exploitation of nature and the consequences for people's life and health

Cardinal Oscar Rodríguez Maradiaga of Honduras, who coordinates the Vatican's inner council of cardinals and is thought to reflect the pope's political thinking, says of *Laudato Si':*

> The ideology surrounding environmental issues is too tied to a capitalism that doesn't want to stop ruining the environment because they don't want to give up their profits.

Carmelite Father Eduardo Agosta Scarel, a climate scientist, says

> Francis has always put the poor at the centre of everything he has said. *Laudato Si'* challenges the way we think. The message that we cannot just treat the Earth as a tool for exploitation will be a message that many will not want to hear. What will save us is not technology or science. What will save us is the ethical transformation of our society.

Francis is direct, in what he says and in what he does. After Papal election he went back to his hotel in the group bus with the other cardinals. He answers the telephone himself, lives in a Vatican guesthouse rather than in the papal apartments, tweets, mingles with tourists and enjoys appearing in selfies, and has invited an old friend in the crowd outside St Peter's to join him in the Popemobile.

He is political. He speaks and acts in sympathy with the Orthodox and Protestant churches, and with Judaism and Islam. He made a special point of meeting Raul Castro the Cuban president at the Vatican, and has taken a lead in the achievement of respectful relations between the US and Cuba, in diplomacy that has included letters to US president Barack Obama. This September he visits Cuba and then the US. Looking forward to Francis's visit to Cuba, Raul Castro said 'I promise to go to all his Masses. I read all the speeches of the pope, his commentaries, and if he continues this way, I will go back to praying and go back to the church. I'm not joking'.

Liberating the oppressed

In his November 2013 apostolic exhortation *Evangelii Gaudium* (*The Joy of the Gospel*) Francis said

> Just as the commandment 'Thou shalt not kill' sets a clear limit in order to safeguard the value of human life, today we also have to say 'thou shalt not' to an economy of exclusion and inequality. Such an economy kills. ... A new tyranny is thus born, invisible and often virtual, which unilaterally and relentlessly imposes its own laws and rules. To all this we can add widespread corruption and self-serving tax evasion, which has taken on worldwide dimensions. The thirst for power and possessions knows no limits.

As bishop of Buenos Aires, Jorge Mario Bergoglio, Francis ministered to the people of the slums in the city. He was one of the many Catholic priests throughout Latin America who in the period of tyrannical dictatorships nourished and upheld the impoverished and oppressed common people. Ideologically organised as Liberation Theology, this movement is in no way communist in the sense of following Marxism-Leninism-Stalinism. But it is communist in the far older tradition of bearing witness to the ministry of Jesus – and of Francis of Assisi – to the community of common people, and accepting the consequences (see Boxes 1 above and 2 and 3 below).

Nourishing the people

Here is the direct link with nourishment, nutrition and public health. Empowerment of the people enables communities and populations to look after themselves, to feed themselves and their children, and to ensure their own food systems and supplies for the future. Without such communal self-confidence, deprivation, dependency, and food and nutrition insecurity, become or remain endemic

Paul Farmer is inspired by Liberation Theology. When he and colleagues including the current president of the World Bank, Korean-American physician *Jim Yong Kim*, started Partners in Health in 1987, he said they 'extremely explicitly' borrowed from

Box 2

Francis on preferring the poor

Francis is persistently accused of being a communist, notably by champions of the current dominant form of capitalism in the US. Here are some of his responses, given to the Italian newspaper La Stampa's Andrea Tornielli and Giacomo Galeazzi.

Can more ethics in economics bring about change, in the form of an increased consideration for social justice, or is it also right to speculate about structural changes to the system?

We need ethics in the economy, and we also need ethics in politics. More than once, various heads of State and political leaders, whom I have met since my election as bishop of Rome, spoke to me about this. They told me that we, the religious leaders, need to help them and give them ethical indications.

We cannot wait any longer to deal with the structural causes of poverty, in order to heal our society from an illness that can only lead to new crises. The markets and financial speculation cannot benefit from absolute autonomy. Without a solution to the problems of the poor, we will not solve the problems of the world. We need projects, mechanisms and processes to implement better distribution of resources, from the creation of new jobs to the integral promotion of those who are excluded.

Why do Pius XI's strong and prophetic words against the international imperialism of money, sound to many – even Catholics – so radical and extreme today?

Pius XI only sounds extreme to those who feel struck by his words and hit where it hurts by his prophetical condemnations. But the Pope was not exaggerating, he told the truth after the economic and financial crisis of 1929.

Preference for the poor

You highlighted the continuity with the tradition of the Church in its concern for the poor. Can you give us some examples of this?

Pope John XXIII said 'The Church shows itself as it wishes to be, everyone's Church, and particularly the Church of the poor.' In the following years, this preferential treatment of the poor entered the official teachings. It is a concern that stems from the Gospel. If I repeated some passages from the homilies of the Church Fathers, in the second or third century, about how we must treat the poor, some would accuse me of giving a Marxist homily.

'You are not making a gift of what is yours to the poor man, but you are giving him back what is his. You have been appropriating things that are meant to be for the common use of everyone. The earth belongs to everyone, not to the rich.' These were St. Ambrose's words, that private property does not constitute an absolute and unconditional right for anyone, and that no one is allowed to keep for their exclusive use things superfluous to their needs, when others lack basic necessities.

St. John Chrysostom stated that 'not sharing your goods with the poor means robbing them and taking away their life. The goods we own are not ours but theirs'... This concern for the poor is in the Gospel, it is in the tradition of the Church, it is not an invention of communism and must not be turned into an ideology, as has sometimes happened in the course of history.

liberation theology, stating from the beginning that 'Our mission is to provide a preferential option for the poor in health care.' Paul Farmer continues to uphold liberation theology. He says 'if you don't understand structural violence, for example, you're grasping around in the dark in public health, public education and poverty reduction. These ideas really warrant not just rehabilitation but widespread dissemination'.

What Francis means

Francis is doing his utmost, using his unique position as Pope, to give sufficient leaders in the world, at all levels, a moral compass. This transcends 'isms', just as Jesus was not a Christian and Francis of Assisi was not a Franciscan. Both, as recorded, drew from deeper wells of wisdom. Francis intends that leaders really and truly, when making choices and decisions, are guided by the golden rule that is found in many philosophies and religions – Do to others what you wish them to do to you. Leaders include rulers. They also include parents. They also include all people, with their responsibility to themselves and to whom they touch. The firm path begins with spiritual rebirth. This is what Francis means.

Box 3

Leonardo Boff on Francis

The Brazilian Jesuit philosopher and former priest Leonardo Boff (1938 -) is a leader of the Liberation Theology movement, dedicated to uphold the impoverished and oppressed. He has always been sharply critical of the pomp of the Church, and has describes US foreign policy as similar to that of 'fundamentalist terrorist states'. In 1985 he was commanded to be silent by the Church in Rome and effectively forced out of the priesthood. He and other Liberation theologians are now embraced by Pope Francis. This is an edited extract of a statement he made after Francis was elected Pope.

The innovations in the customs and speeches of Pope Francis have led to an acute crisis in the conservative groups. They find it especially intolerable that the Pope received in private audience one of the pioneers of the 'condemned' Liberation Theology, Peruvian Gustavo Gutierrez. They are stunned by the Pope's sincerity in recognising the Church's errors, and his own, and in denouncing the careerism of many prelates. What really scandalises them is the inversion he makes, by putting in first place love, mercy, tenderness, dialogue with modernity and tolerance towards people, and only in last place, ecclesiastic doctrines and discipline.

Pope Francis is restoring to the papacy the tradition of Jesus and the Apostles. He is eliminating the pagan customs of the papacy, within the spirit of the Gospel, lived so emblematically by his mentor and inspiration, Saint Francis of Assisi.

The authentic tradition is on the side of Pope Francis. The 'traditionalists' in the Church are closer to the palace of Herod and Caesar Augustus, than to the grotto of Bethlehem and the house of the artisan from Nazareth. In contrast to them is the example of Jesus and his sayings about having nothing, about simplicity and humility, and power as service, rather than as exercised by the pagan princes and lords who subjugate and dominate. Pope Francis speaks from the original tradition of Jesus and the Apostles.



WN *Nourishment. Meals*

Fasting and feasting are normal

Access June 2015 Geoffrey Cannon on fasting here



Conventional nutrition professionals work on the assumption that everybody does or should consume three meals a day, and that the amount of dietary energy consumed daily is much the same except on indulgent occasions. This assumption is inaccurate. A large proportion of the human population now does eat like this, but another large proportion does not, including those whose serious observance of fasting is good for their well-being. The assumption is also wrong. It is natural to fast – and to feast

Here is more on fasting. Last month in *WN* I told the story of my six weeks (which became twelve weeks) *on my tweaked version of the Daniel fast*. My general idea has been to start with a modified *all-raw fast* (Daniel) and then move to a water-only fast for four weeks for the month of July, and then back to six weeks of Daniel, which will bring me to the middle of September. No, it won't bring me to the end of me.

After that? Well, one of the reasons to prolong a therapeutic or healing regime is to give the body time to adjust, so that natural desires and appetites for food are repaired and refreshed. As a result of this training, as with increased and sustained physical activity, the body – being alive and not a machine – shifts its physiology and biochemistry. The process is like coming off drugs – which in a real sense is what many ultra-processed products are. These now amount to more than half the dietary energy consumed by populations in countries where obesity and diabetes are rampant.

Well, that's a central theory on fasting, and I believe it. So as from mid-September I intend to let my body rather than my mind guide my behaviour around eating and

drinking, while always remaining sensitive to those substances that are formulated to be quasi-addictive. We all should know what these are!

Last month I stated that fasting is neglected by conventional nutrition science, despite observance of various types of fasting having been and remaining a regular practice of a high proportion of humanity. Blogs, books and businesses in aid of fasting are now booming. Some entrepreneurial advocates of fasting are formally qualified physicians or nutritionists. Some scholars have especially in this century made a special study of fasting. These include the team at the University of Heraklion in Crete led by *Anthony Kafatos*, Joan Sabaté and his colleagues at the Seventh-day Adventist Loma Linda University in California, and the *Daniel specialist Richard Bloomer* at the University of Memphis. Tennessee. Commitment to the theory and practice of fasting goes against one of the doctrines of conventional nutrition but there are now an increasing number of distinguished and experienced commentators and researchers who have come out of that box or were never in it, as readers of *World Nutrition* will know.

The three meals a day doctrine

Now I come to a conclusion which may seem contentious, but surely to any observant person with knowledge of history is obviously true. Conventional professionals characteristically work inside a box that assumes three meals a day, with daily and weekly intake remaining much the same – except at weekends, holidays, and any other indulgent occasions. But the three-meal-a-day convention is a recent cultural construct, and besides, evidence that the habit has any special health benefit is shaky.

So why assume or impose three meals a day? I can think of several reasons, none good. First, the types of folk who commission, design and carry out studies on nutrition, and also their subjects, typically themselves consume three regular meals a day – often plus snacks and drinks. This is true in the US, UK, high-income territories formerly part of the British Empire, and in Western European countries, which together control most elaborate research projects.

Second, the dominant religion in these countries is Protestant or Catholic Christianity, where observance of the Lenten Fast in commemoration of Jesus's 40 days and 40 nights in the wild is now notional or ignored. Third, the fact that regular fasting is usually observed for religious or spiritual reasons, makes most scientists' flesh creep. Superstition! Dangerous too, no doubt! Fourth, the assumption of three regular meals a day makes data collection and number crunching neat and tidy – but spurious. To paraphrase a saying attributed to Albert Einstein, what is most easily counted may well not be what counts.

So I maintain that for a full understanding of nutrition and health, fasting (of different types) must be taken into account. Also, such understanding needs to include feasting as well as fasting, which together should balance. Further, I assert that radical fasting, is as a rule – with of course exceptions – beneficial, salutary, and often transformative.



WN *Nourishment. Supplementation*

Multimistura. Of, by and for the people

Access June 2015 Geoffrey Cannon on the Daniel fast here





The Daniel fast is raw vegan. It is great! My variation is mainly salads and fruits and other plant food. I exclude all grains, and include very delicious items like tahini – and my magic multimixture

Daring to do a Daniel

As I write I am completing 12 weeks of the Daniel Fast. Note please, 'fast'. Daniel is not a dieting regime. Wrong attitude! It is an adventure, one aspect of which is a spiritual exercise. Like any radical fast, it is also designed to balance, cleanse and heal the whole human being. It has done wonders for me, and not only for my blood pressure. After two weeks of a 'healing crisis', it has boosted my energy and enthusiasm, and thus sense of purpose. Daniel is also beautiful and delicious – see my pictures above taken at home, of a salad and fruit. My own special addition is what is known here in Brazil as the *multimistura* (multi-mixture), which is the topic of this item.

As I write, I get a kind note from Marion Nestle of *Food Politics*, now a member of the *WN* family, in response to an enthusiastic email. 'What is a Daniel Fast?' she replied. 'I don't like the sound of it. Are you OK?' Other friends say 'are you consulting a doctor?' Or 'isn't it risky, what you are doing?' Or 'you should check your electrolytes and B12'. Or 'you are crazy!' And, 'are you taking supplements?' The answers are – yes; no; good; mn-hm; like a fox. And yes, I am using a very special supplement.

On the question of risk, people who advocate radical fasts – my *Daniel Fast* being an example – point out that 'normal' diets are decidedly risky, and that the consequences of surrender to a diagnosis of serious chronic disease in which you transform from a person into a patient, are demoralising, expensive and time-consuming. But enough of defensiveness! This story is about 'yes' to supplementation, except that it all depends on what the supplements are made from. Mine is not purchased at a pharmacy, it is strictly artisanal, an elixir made from food. *The multimistura.*

My hymn to multimistura



Dona Senhorita Ribeiro and her healthy happy family, in Cabeceira de Cruz, an arid region within Minas Gerais, South-Eastern Brazil, Manufacture of multimistura by her family and community and for local sale, with simple hand equipment donated by the local pro-people Catholic church, sustains and protects the children and binds the families together in solidarity and hope for the future

Here is my celebration of *multimistura.* This is the word used in Brazil for an artisanal or home-made powdered food 'multi-mixture' used as a food supplement. Versions are also made and sold ready-made or as separate ingredients by small businesses. It looks like coarse wholegrain flour, and smells and tastes earthy. It was originally devised in Brazil to prevent and treat undernutrition of children especially in impoverished communities (an example is above).There is more to be written about the whole context of *multimistura* and the pro-poor philosophy and programme of which it is a part, in a later *WN* contribution.

The ingredients of *multimistura* or their balance varies, depending on the time of year, on what is available, and preferences of the makers. Like genuine fresh hand-made wholegrain bread, or papaya or mango plucked off the tree and enjoyed warm, or agro-ecological farming, or a traditional meal made in a family restaurant, *multimistura* is basically of, by and for the people. It enables families like the one shown above, and their communities, when taught and supplied with simple equipment and engaged in its manufacture and local distribution, sale and use, to become more autonomous, and given its efficacy, less likely to become dependent on and financially ruined by drugs.

The *multimistura* is generally rejected and even hated by the nutritional establishment here in Brazil. Versions devised in many other countries are also nixed as outlaw by national professional bodies. As far as I know, there is no account of *multimistura,* or any other artisanal food supplement, in any conventional nutrition textbook or journal. It is though celebrated by Francis Moore Lappé and Anna Lappé as part of the official pro-people public health programmes of Belo Horizonte, Brazil's fourth biggest city (2).




Two ingredients of multimistura. Dried and then powdered mandioca (cassava) leaves, and powdered eggshells. Unsafe, unclean? There is no record of anybody using multimistura coming to any harm

So why the hostility? Well, *multimistura* cannot be patented, simply because it is made from food. The drug and commercial supplement industries don't like that. No ching, ching. Its composition varies, just like that of any freshly made dish and meal, and like home cooking it is typically made by hand. This makes food safety regulators anxious. Unclean, unclean! One of its ingredients is powdered eggshell, and we all know that chickens are often infected with salmonella. Plus its principal use is to protect the health of children, including as treatment of moderate and severe under-nutrition, and sometimes even marasmus. This alarms the medical profession. Dangerous, dangerous! But subject to correction, there are no substantiated cases of children coming to serious harm because of being fed *multimistura*.

Yet another feature of *multimistura* is that much of it is made from parts of food that are conventionally seen as useless or garbage. This makes it unpopular with middle class people, and also aspirational lower class people, because a defining characteristic of being middle class is despising or discarding anything that's not new, shiny or nice. Recycling eggshells? That's for destitutes or hippies!

What is in it?

Now I hope you will be bursting to know what is in *multimistura*. It is a coarse powder made by pulverising its ingredients. Two of these, dried *mandioca* (cassava) leaves, as well as eggshells, are shown in the pictures above, taken in a local clinic run by woman in the town of Araguaiana, in the north of the state of Tocantins, east of Pará and west of Maranhão. The other main ingredient by weight is powdered rice bran (picture below, left) or *mandioca* root. All these, plus a variety of pulverised nuts and seeds.

Just like attitudes to making meals, *multimistura* advocates tend to be either purist or tolerant about ingredients. Purists may insist that the leaves must be *mandioca*, or on specific nuts and seeds. Tolerant people say that some other green leaves are fine, as are whatever nuts and seeds are most available (not salted, of course). Purists may say that the mixture must be balanced in known nutrients – protein, say, or carotenoids or selenium, and so on, and there are plenty of analyses (in Portuguese) to that effect on the internet. This surely misses the point, which is that being made from food, the



Two more ingredients of multimistura. Coarse flour made from rice bran in a 50-year old machine (left), and (right) my addition, pulverised mesocarp of the babacu palm fruit, exclusive to Amazonia

mixture contains myriad bioactive substances that are either not classed at nutrients, or whose properties are not well known, or else are unknown and thus 'off the map', all in a natural balance. Tolerant people object to rigidity, believing that makers of *multimistura* should feel free to use what is available including in different regions and seasons. This makes the mixture adaptable for formulation and use in other countries.

As with making meals, I am tolerant, and also adventurous. I add an extra coarse powder made from the mesocarp of the nut of the *babaçu* palm (above, right), native and exclusive to northern Brazil… Aha! This gives me an entrepreneurial idea. Branding! With mesocarp of *babaçu*, which carefully analysed no doubt will be rich in all sorts of goodies, my very own *multimistura* could be marketed as Dr João's *misticomistura* (mystic mixture). Now I must check how *'multimistura'* translates into Japanese and German, and the languages of other potential promising markets…(2).

As well as sprinkling *multimistura* on my salads, every day I am making a porridge with lots of *multimistura var Dr João* (2), dried fruit, nuts, slices of banana and papaya, and ginger. Extremely delicious and sustaining. This is to boost my immune defences for when I shift from my Daniel Fast to my long water-only fast in July. After that I will transition to Daniel again, and then I will integrate *multimistura* into my daily diet.

So this is my take on supplementation. My system will be replete with vitamins, minerals, trace elements and bioactive substances known to be essential or helpful, plus a myriad of other bioactives, many known or believed to be vital, very many more little known or unknown and thus off the conventional nutrition map, and all in natural combinations. Walter Willett says we all should take a well-formulated vitamin pill (2). But these typically are ultra-processed products formulated so that their chemistry matches that of isolated micronutrients. Many *now made in China,* are formulated from a base of coal tar or petroleum or acetylene gas. No, thanks! *Multimistura* is a much better choice, and I must send some to Walter. Sure beats pills.

A philosophy of nourishment

The *multimistura* has a context. This is indicated by the picture of Dona Senhorita Ribeiro and her family introducing this story, taken in the impoverished northern

backlands of Minas Gerais, the big Brazilian state where I live. It is part of a whole national programme and philosophy of nourishment first known as *Alimentação Alternativa*, and then later and now as *Alimentação Sustentável* (roughly, 'Alternative Food and Nutrition' and then 'Sustainable Food and Nutrition').

After 15 years in Brazil, and thinking about its significance, I judge that *Alimentação Sustentável,* and the *multimistura*, are profoundly important, not least because they confront and challenge discredited theory and practice. A new people-centred world order based on principles of justice and equity, like those espoused by Pope Francis, can succeed only if it recognises, validates and enables righteous food systems and supplies that respect and sustain their human, living and material environments, centred not on nutrients but mainly on locally sourced foods and meals.

This is beginning to sound like a new philosophy of nourishment, in the tradition of dietetics as taught and practiced for millennia. But more of this later. Now I will enjoy my infusion of bitter orange, ginger and cloves.

Notes and references

1 Lappé FM, Lappé A. *Hope's Edge. The Next Diet for a Small Planet.* New York> Putnam, 2003. Frances and Anna visited a nursery school in a Belo Horizonte *favela*, as I did at about the same time. They write of the *multimistura* 'Most goes to 20,000 young children through the city's public health clinics. Two-thirds of the severely malnourished children… are improving as a result'.

2 Just kidding. John is my middle name, which is João in Portuguese and Spanish.

3 Willett W. *Eat, Drink and be Healthy.* New York: Simon and Schuster, 2003. Chapter 10 of Walter's excellent guide is titled 'Take a multivitamin for insurance'

Status

Please cite as: Cannon G. What they believe #19. Pope Francis. Empowering the people, saving the planet, and other stories. *What do you think?* [*Column*] *World Nutrition*, July-August 2015, **6**, 7-8, 623-635. Obtainable at www.wphna.org. Contributions to *World Nutrition* are the responsibility of their authors.

How to respond

Please address letters for publication to wn.letters@gmail.com. Letters usually respond to or comment on contributions to *World Nutrition*. Usual length for letters is between 300 and 1000 words. Once edited, letters are sent to the author for checking and approval.