begetslave

Continuing ideas for exploring the environment, starting the 2021 International Year of Fruit and Vegetables

2021 dawned as human health still negatively headlined the news with Covid-19 and issues over its vaccine distributions. So, on January 3rd, I found it refreshingly positive to hear the following from the Food and Agriculture Organisation (FAO) at the 2021 International Year (IY) launch: "In the current health crisis, we are facing around the world, promoting healthy diets to strengthen our immune systems is especially appropriate." [1] (See box at the end of this article for all [resource weblinks].)

This article will suggest introductory learning activities and resources to support the 2021 IY. What is this IY? (Well, it's actually one of four! [2]). The name of this IY is hidden in the title as an anagram:

'stiruf' & 'begetslave' Here's a clue to help solve it. This IY's slogan is "your dietary essentials".

Healthy Food Groups

Need another clue? The words name two of the five food groups. Health-wise we should know these five and the amounts we should have daily. What are they? *Greenville Healthy System's "Healthy Made Easy*" slide 34 [3] has a clear visual image of these food groups, their amounts and benefits. It is suitable for younger children. For some other web-based activities on these food groups, try:

- picture books A Little Pinch of Perfect's webpage 'Learning about 5 food groups" [4]
- videos for the young- ditto.
- the design base of slide 34 above ditto.
- printable worksheets Nourish Interactive's "Five Food Groups Learning and Activity Sheets" webpage [5]. Each of the 18 sheets is described and states its target age group and grade level.

So, returning to the anagram, the answer is of course ... the IY of Fruit and Vegetables (IYFV)!

Summarised, the four IYFV aims are to:

- raise awareness of fruits and vegetables for health
- promote their place in diets and lifestyles
- reduce the waste in their food systems
- share best practice for their whole food system.

(For full details, see the FAO main webpage [6].)

The IYFV has six key messages [6]:

- 1. Harness the goodness
- 2. Live by it, a diverse diet
- 3. Respect food from farm to table
- 4. Innovate, cultivate, reduce food loss & waste
- 5. Foster sustainability
- 6. Growing prosperity.

This IYFV is an opportunity to learn more about your fruits and vegetables. What themes and projects do these aims and messages suggest? A wide range of learning activities and projects could link in with this IYFV. Some examples could be nutrition comparisons (health science), how to grow plants (agricultural sciences), traditional foods/recipes (cultural environment) and following a paddock to plate system (economic environment).

Definitions

What are fruits and vegetables (F&Vs)? How do these differ? Examine your F&Vs at home, in the cupboard, fridge or garden for what makes it F or V. Colour differences? Sizes? Shapes? Create definitions. Then check F&V (nouns) in a dictionary to see how they vary.

Some definitions are not easy. The FAO's IYFV Background Paper [7] notes that "There is no widely accepted definition for either fruit or vegetables." It provides this definition "edible parts of plants (e.g. seedbearing structures, flowers, buds, leaves, stems, shoots and roots), either cultivated or harvested wild, in their raw state or in a minimally processed form. " Exclusions from this F&Vs definition includes: tubers; pulses; nuts; cereals; herbs; stimulants; wines; and fruit juices. Defining F&Vs includes identifying which it is. Consider the photo right. Name it, and if it is a fruit or a vegetable? Check your answer in a reliable source, e.g. on the *Britannica* webpage '*capsicum*' [8]. Surprised?



There is a list of fourteen 'vegetables' that are 'fruits' in a 2018 *Business Insider Australia* article [9]. What impact does this misnaming have on the 'five food groups' dietary guidelines? The *ABC* has a 2015 article [10] which discusses this issue.

Identifications

Knowing some familiar plants forms a base for learning about any of the IYFV aims or messages. So check how your children go at naming F&V plants in your garden and other familiar places, and then unfamiliar ones, e.g. in a community garden.

Are common and scientific (Latin) names known? This is a good time to introduce them and why they are used. For resources, the *Middle–Sized Garden's* 4-minute video [11] is excellent and the *Garden Helper's "Plant Names"* webpage [12] is very good.

Another activity might be using photos, like the ones at the bottom of the page. What are these plants in my garden in early January? How do you know? Are they vegetables or fruit? From the left, they are : spring onions and silver beet (both vegetables); and capsicum/green pepper and zucchini/courgette (both fruits). Yes!

What about checking basic F&V plant knowledge with a matching game? This one needs photos to be taken of each plant, leaf, flower and fruit/vegetable. Print them out so they can be manipulated. Make a name card for each, in English and, if desired, in scientific names. Organise separate groups of each. The challenge is to match English name, (and scientific name), whole plant, leaf, flower and fruit/vegetable. For any that were not well enough known, these resources can be used to create a poster to get to know them better.

'Harness the goodness'

What do your children know about the good reasons for eating F&Vs, especially the ones you grow and/or buy? The general benefit is found in the IYFV's first message (FAO, [6]) : "Fruits and vegetables have multiple health benefits,

including the strengthening of the immune system, that are essential for combating malnutrition in all its forms and overall prevention of non-communicable diseases."

FAO lists the 'multiple health benefits' [13] as: "children's growth and development; longer life spans; better mental health; healthy heart; lower cancer risk; lower obesity risk; lower diabetes risk; better gut health; and improved immunity".

Do these specific health benefits come from the F&Vs in your home or garden? Such information is easy to find both in books and online. However, be aware that they vary in complexity and relevance to different places.

As a quick summary communication, charts can be helpful, e.g. the '*Herbs Info*'s chart [14] is clearly set out, covering twenty F&Vs, each with five benefits. Identify the health benefits relevant to your family and your environment.

Unfamiliar health words can be researched to extend knowledge to different health environments. For example, *Lybrate's 'Healthy benefits of* Capsicum' [15] lists it as a cure for Yellow Fever. So research this disease: what it is; where it is a problem; and what is in capsicum that can help cure it.

Vitamins, minerals and antioxidants often come up in the benefits. They are an important background for understanding the value of F&Vs. So, if what they are and do is unknown, it's time for research in a dictionary and/or other resource, e.g. *Graphic Education's* fourth *'Basic Nutrition'* poster [16] has a clear explanation of these terms.

In onecup, you'l get 25ths of your daily Vlamin Aneedsandabout 1/8th eachof Manganeseand/ItaminC ... andlots of other vitamins, minerals and antioxidants in smaller amounts [1/7]

Eat me

WhatdoyouneedMamin Afor? Youreye-sight and lighting infections! ... Agoodidea for those on screensalot in these Covid-

Explore the health benefits of an F&V, e.g. a zucchini/ courgette (photo above). These two webpages cover its many vitamins, minerals, antioxidants and their benefits: *Healthline's "12 Health and nutrition benefits of zucchini"* [17]; Dr. Axe's chart '9 Benefits of Zucchini"[18].

Visual communications

How could such specific F&V research be reported and/or communicated to others? Consider creating an Arts or other visual communication. What makes for a good one? While doing research, notice elements (like colours, format, fonts, language, etc) that work well in diagrams on the web and in books. Then good ideas can be used later, e.g. add a message to a photo. (Does this 'zucchini' one work well?)

Content-wise what else could be included? Photos or drawings of it? An arrow to the edible part? Identification - fruit or vegetable? Its history? When and where it grew in your garden? Your favourite uses/recipes? What is wasted when eaten? Where does this waste go?

Design-wise, what will make it look great? Apply those good ideas that were noticed during research time - and improve on them!

Could something be made for each of your F&V plants/foods? Together, could they become a display or a book? From researching and creating, involvement will improve awareness of nutritional/health benefits of eating relevant F&Vs – dietary essentials for a healthy life. Thus the IYFV's first aim and first message about their goodness can fit into your family's context. What about sharing your creations of such positive health messages with other people in 2021's IYof Fruit and Vegetables?

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| Links to webpages in this article by groups |
|---|
| UN IYs for 2021 |
| [1] https://www.theland.com.au/story/7072134/2021-declared-international-year-of-fruit-and-vegetables/ |
| [2] https://www.un.org/en/sections/observances/international-years/ |
| [6] IYFV website http://www.fao.org/fruits-vegetables-2021/en/ |
| Food groups |
| [3] https://cdn.kinsights.com/cache/2f/a7/2fa75c6d0162a255d2b1bcf3f043deb0.jpg and |
| https://image.slidesharecdn.com/healthymadeeasyforprint-160331184829/95/healthy-made-easy-34- |
| <u>638.jpg?cb=1459450466</u> |
| [4] https://alittlepinchofperfect.com/learning-about-5-food-groups/ |
| [5] http://www.nourishinteractive.com/nutrition-education-printables/category/92-five-food-groups-kids-learning-worksheets |
| Definitions - Fruit or veg? |
| [7] <u>http://www.fao.org/3/cb2395en/CB2395EN.pdf</u> definition on pages 3 and 5 of the background paper |
| [8] https://www.britannica.com/plant/squash |
| [9] https://www.businessinsider.com.au/fruits-and-vegetables-difference-2018-6?r=US&IR=T |
| [10] <u>https://www.abc.net.au/news/health/2015-11-11/do-you-know-the-difference-between-fruit-and-vegetables/6927012</u> |
| [11] <u>https://www.youtube.com/watch?v=RbL8FSAz3mA</u> from the botanist at the Oxford Botanic Gardens |
| [12] http://www.thegardenhelper.com/plantnames.html |
| Health benefits |
| [13] http://www.fao.org/3/cb2395en/CB2395EN.pdf benefits on pages 11-12 |
| [14] <u>http://www.herbs-info.com/blog/wp-content/uploads/2016/04/Amazing-Health-Benefits-Of-20-Fruits-And-Vegetables.gif</u> |
| [15] https://www.lybrate.com/topic/benefits-of-capsicum-and-its-side-effects#health-benefits-of-capsicum-vegetable and |
| https://assets.lybrate.com/q_auto:eco,f_auto,w_850/imgs/product/health-wiki/bpages/Health-Benefits-Of-Capsicum.jpg |
| [16] https://graphiceducation.com.au/product/vitamins-minerals-and-antioxidants/ 4th poster or go direct to |
| https://graphiceducation.com.au/wp-content/uploads/2017/03/p_1_5_4_0_1540-Vitamins-Minerals-and-Antioxidants- |
| <u>724x1024.jpg</u> |
| [17] https://www.healthline.com/nutrition/zucchini-benefits |
| [18] <u>https://draxe.com/wp-content/uploads/2015/07/ZucchiniBenefits.jpg</u> |
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