Feeding children:
how to make the healthy choice
the happy choice?

Sophie Nicklaus, PhD, Research Director
Centre des Sciences du Goût et de l’Alimentation / Center on Taste and Feeding Behaviour
Dijon, France

September 7th, 2017
Feeding vegetables (and fruits)
The nutritionist’s point of view

It’s a MUST

Food Guide Pyramid for Young Children
A Daily Guide for 2- to 6-Year Olds
The kid’s point of view

It’s a NIGHTMARE
The 4 major problems with vegetables

TASTE

ABSENCE OF MARKETING

LOW CALORIES

EDUCATIVE TENSION
The problematic situation

UNFAIR COMPETITION
How to get kids to eat their veggies?
Make veggies available at home!
Eat veggies during pregnancy and breastfeeding!

Transfer of (some) flavors
Start early

Eating behaviour is a learned behaviour

Early learning is
• Easier
• More sustainable
...before the onset of food neophobia

1st stage introduction of **new flavours**

2nd stage introduction of **a variety of textures**
Persist

Eating behaviour is a learned behaviour
It may take time to like the taste of some veggies
Remember the first time you...
Variety boosts the acceptance of new vegetables
Providing choice promotes consumption
Cook

COOKSMARTS’ GUIDE TO ENJOYING VEGETABLES

Here’s your guide on how you can fill your diet with a whole variety of vegetables. Enjoy them in season for tastiest (and least expensive) results!

<table>
<thead>
<tr>
<th>WAYS TO ENJOY</th>
<th>BEST IN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sauté</td>
<td>Winter</td>
</tr>
<tr>
<td>Steam</td>
<td>Spring</td>
</tr>
<tr>
<td>Pureèd Soups</td>
<td>Summer</td>
</tr>
<tr>
<td>Roast</td>
<td>Fall</td>
</tr>
<tr>
<td>Boil</td>
<td>Noodles</td>
</tr>
<tr>
<td>Noodles</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ASIAN SQUASH</th>
<th>ARTICHOKE</th>
<th>ARUGULA</th>
<th>ASPARAGUS</th>
<th>BEETS</th>
<th>BELL PEPPERS</th>
<th>BEEREN</th>
<th>BROCCOLI</th>
<th>BROCCOLI RAISIN</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://guidingstars.com/" alt="Image" /></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BRUSSELS SPROUTS</th>
<th>BUTTERFLY SQUASH</th>
<th>CABBAGE</th>
<th>CARROTS</th>
<th>CAULIFLOWER</th>
<th>CELERY</th>
<th>CHERNO</th>
<th>COLLARDS</th>
<th>CORN</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://guidingstars.com/" alt="Image" /></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CUCUMBER</th>
<th>DILL PLANT</th>
<th>ENDIVE</th>
<th>FENNEL</th>
<th>GREEN BEANS</th>
<th>KALE</th>
<th>LEeks</th>
<th>LETTUCE / MUSTARDS</th>
<th>MUSHROOMS</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://guidingstars.com/" alt="Image" /></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WESTERN GREENS</th>
<th>ONION</th>
<th>ORANGE</th>
<th>PARSNIPS</th>
<th>PEPPERS</th>
<th>RYE BERRY</th>
<th>RADISHES</th>
<th>RABBIT</th>
<th>RUZHGANAS</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://guidingstars.com/" alt="Image" /></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SWISS CHALET</th>
<th>SUGAR SNAPPEAS</th>
<th>SPINACH</th>
<th>SWEET PEPPERS</th>
<th>TOMATOES</th>
<th>TRUMPETS</th>
<th>ZUCCHARO / SUMMER SQUASH</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://guidingstars.com/" alt="Image" /></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


https://guidingstars.com/
Educate

Familiarize children smoothly

Explain their origin
Read stories

Let children touch, cut, process, smell, taste, ... and spit out!
Talk

Did you see this beautiful color?

Cool. Squash season is back!!!

They taste like the tomatoes in Grand Pa’s garden

They’re good for your health

You seem to be enjoying it!

They are full of vitamins
Be a role model

... while I eat my burger
Be a role model
Win the competition

• Serve vegetables when children are hungry at the beginning of the meal, or during snacks

• Avoid dual plates with starches, or serve vegetables before starches
Relax

Never force feed

Children have a small stomach

It creates a negative context

http://naitreetgrandir.com/
Respect

We all have aversions...
Why couldn’t we respect those of our children?
VARY
START EARLY
COOKING
EDUCATE
TALK
FOOD NEOPHOBIA
BREAST FEED
BE A ROLE MODEL
RELAX
PERSIST
Further reading

S. Nicklaus

Thank you for your attention

The children and their parents

sophie.nicklaus@inra.fr
@SophieNicklaus

http://www2.dijon.inra.fr/csga/index.php