

Avocado and the Health of the Latino Population

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Objectives

Attendees will summarize the:

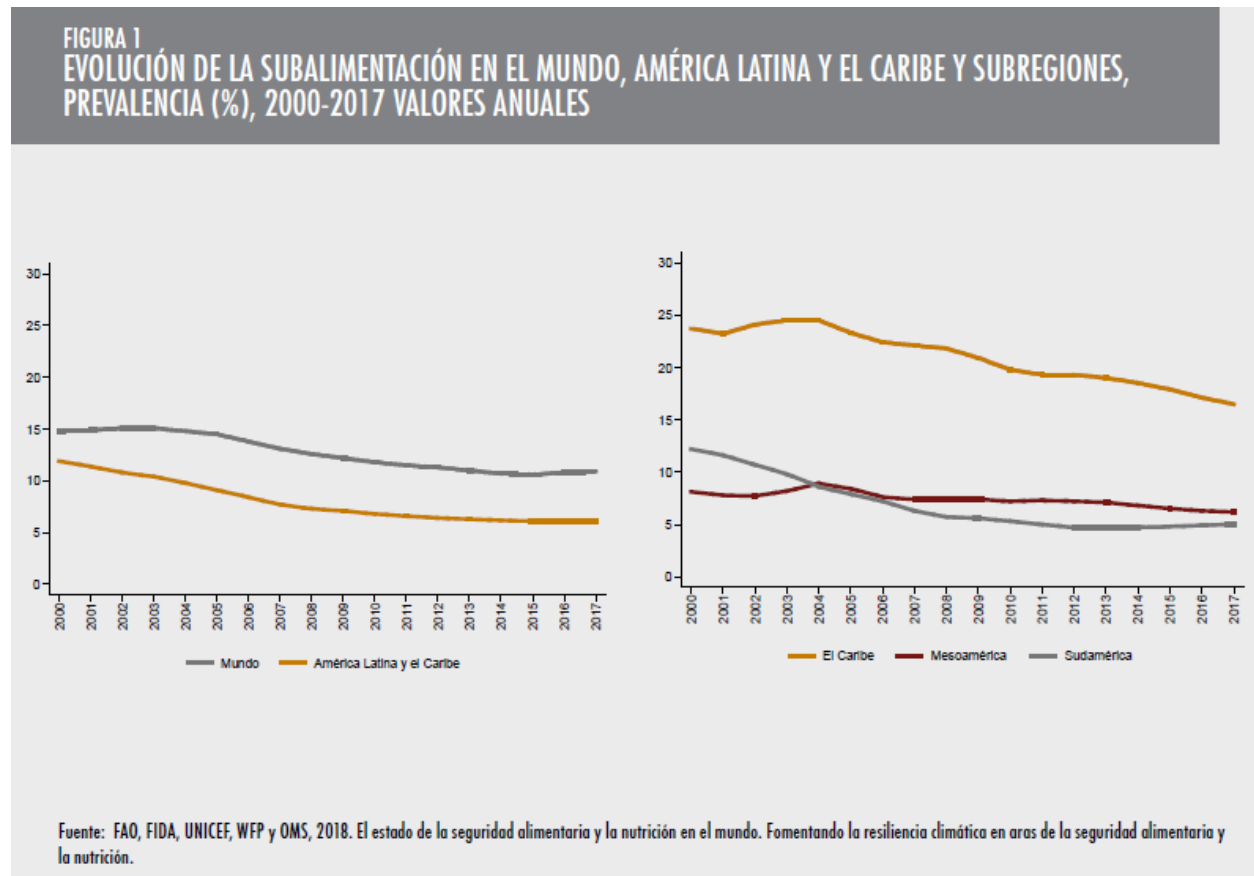
1. Health and Nutrition Status of the Latino (LA) Population
2. Avocado: Nutrition & LA Research
3. Avocado: Diet and Cuisine
4. Suggestions for Working with LA Consumers

1. Health and Nutrition Status of LA Pop

- a. Double Burden: Under and Overnutrition

Undernutrition – Stunting, Underweight Wasting, Anemia

- Overall status has improved but still problematic



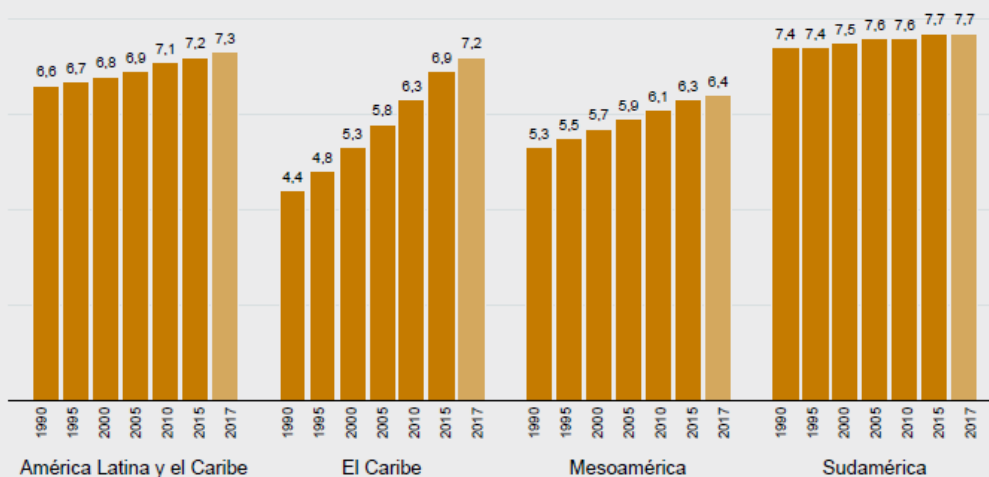
(FAO, OPS, WFP y UNICEF, 2018 pp.4)

Overnutrition – Overweight, Obesity

- ~ 57% (302 million; 54% men and 70% of women) are overweight
- ~ 19% (100.8 million; 14.6% men and 24% in women) are obese.
- Highest prevalence of obesity in adults:
- Overweight: El Salvador (33%), Paraguay (30.1%) for women; Uruguay (23.3%), Chile (22.0%) for men.
- Obesity: Children in Latin America: Chile, Uruguay and Costa Rica, >12% for girls; Uruguay, 18.1%, Chile 11.9%, Mexico, 10.5 for boys

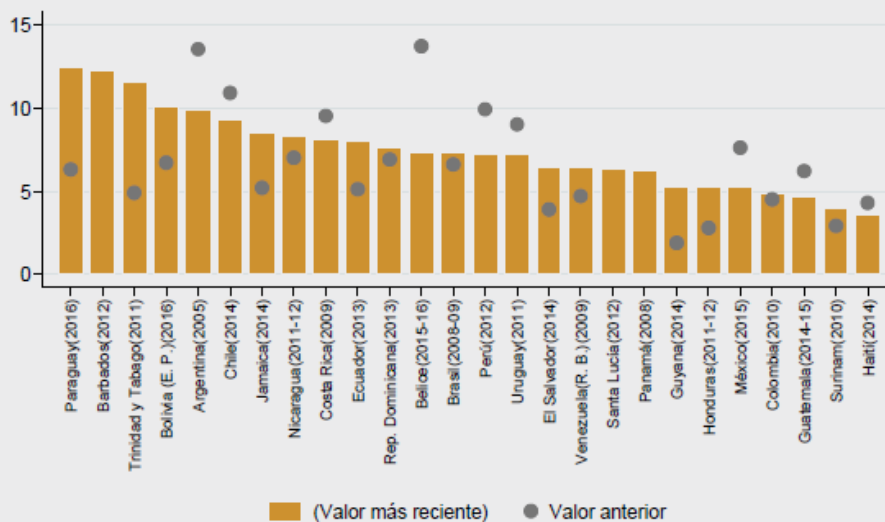
- Costa Rica (12.4%);

FIGURA 6
EVOLUCIÓN DEL SOBREPESO EN NIÑOS Y NIÑAS MENORES DE 5 AÑOS EN AMÉRICA LATINA Y EL CARIBE Y SUBREGIONES, PREVALENCIA (%), DISTINTOS PERIODOS



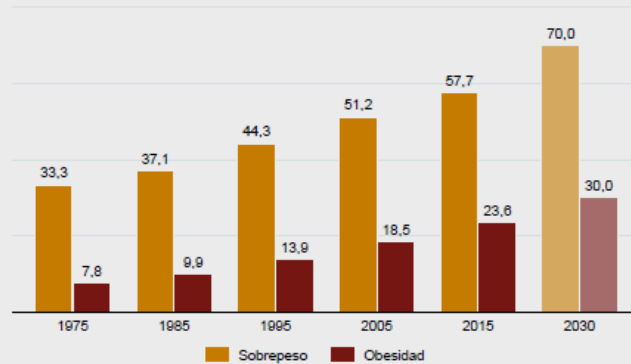
Fuente: OMS, en línea. *Global Health Observatory data repository.*

FIGURA 7
SOBREPESO EN NIÑOS Y NIÑAS MENORES DE 5 AÑOS EN PAÍSES DE AMÉRICA LATINA Y EL CARIBE, PREVALENCIAS (%), DISTINTOS PERIODOS



Fuente: OMS, en línea. *Global Health Observatory data repository.*

FIGURA 18
EVOLUCIÓN DEL SOBREPESO Y LA OBESIDAD EN AMÉRICA LATINA Y EL CARIBE EN PERSONAS MAYORES DE 18 AÑOS, EN PORCENTAJE (%), DISTINTOS AÑOS



Fuente: Elaboración propia con base en OMS, en línea. *Global Health Observatory data repository* y DAES, 2017. *World Population Prospects: The 2017 Revision*.

** Proyección bajo el supuesto de que las tasas nacionales mantengan una tendencia lineal. Para el cálculo del valor de América Latina y el Caribe se utilizan las proyecciones de la población del Fondo de Población de las Naciones Unidas.

** La obesidad corresponde a un IMC igual o mayor a 30 y el sobrepeso a un IMC igual o mayor a 25, es decir, considera a la población obesa.

(Garcia-Garcia; FAO, OPS, WFP y UNICEF. 2018, p. 10, 12, 26)

Some country-specific notes (not all-inclusive):

Mexico

-7 out of 10 persons are overweight or obese; 336.4% of persons 12-19 yrs. of age

-25% have hypertension and 9.7% confirmed diabetes

-research indicated children preferred water, sweetened beverages, fruits, pizza, flavored milk and French fries.

(Tijerina Wall, 2019; Encuesta Nacional, 2016, Sanchez-Garcia 2014))

El Salvador

-Highest prevalence of obesity (33%) in adults

-27.73% children 9 yrs. with stunted growth; anemia has increased

(Galicia, 2016, INCAP, 2017)

Guatemala

a. Anemia (32.4%) in children < 5 yrs.; a severe problem (as in Bolivia)

b.46.5%, children <5 are stunted

c.24.2 % pregnant women are anemic

(FANTA/FHI, 2017)

Belize

- Experiencing a “Nutrition Transition” that includes an increase in imports, increased consumption of meat, dairy, processed and ultra-processed products. This may be one of underlying causes of rise in obesity and overweight, NCDs.

- 27% of population obese
 -11.4% with hypercholesterolemia and 13.5% diabetes
 (Watkins, 2009)

Brazil

a. Brazil had best improvement in decreasing stunting among children (Galiccia, 2016)

Chile

a. Implemented among the tightest food labeling laws (Kaufer-Horwitz, 2018)

Argentina, Brazil, Chile, Costa Rica, Guatemala and many other LA countries have developed dietary guidelines for the general population in order to promote health. (FAO)

2. Avocado: Nutrition & LA Research

a. Cardiovascular diseases (CVD) are a major cause of death in Latin America and risk factors such as overweight, obesity, and diabetes are increasing. Low high-density lipoprotein, high low-density lipoprotein, and high levels of triglycerides are among the common dyslipidemias associated with CVD. (Lanas, Seron, Lanas, 2013)

b. Avocado in a mixed meal had beneficial results (n=14; 30 day trial). Triglycerides decreased and HDL increased. The “VLDL & LDL had a similar percentage decline for both groups.” (Anderson Vazquez, 2009, pp. 84).

c. Addition of avocado (n=30; 4 week trial) found some weight gain but decrease in serum cholesterol and LDL and HDL increased (Diaz Perilla, 2004)

d. Comparison of a non-vegetarian and a vegetarian diet (n=13; 4 week trial) with avocado found a significant decrease in LDL and benefits with the avocado diet. (Carranza-Madrigal, 1997)

e. A monounsaturated fatty acids-rich (MUFA) diet w/avocado as the major MUFA source (n=16, 2 week trial) can be used to avoid hyperlipidemia. (Alvizouri-Munoz, 1992 pp. 163)

f. A high MUFA plan with avocado improved lipid profiles in healthy persons and persons with mild hypercholesterolemia (n=82). (Lopez-Ledesma, 1996)

g. A high MUFA plan with avocado for patients with non-insulin dependent diabetes mellitus (NIDDM) showed a minor hypercholesteremic effect and decreased plasma TG levels. (n=12; 4 week trial). (Lerman-Garber, 1996)

3. Avocado: Diet and Cuisine

Examples of Popular Dishes: avocado a cultural staple

- Mexico: the triangle – The “Triangle” corn, beans and avocado, *Guacamole*
- Costa Rica: *Patacones* with Guacamole
- El Salvador: *Pupusas* w/Tomatillo, Salsa, Avocado
- Honduras: Honduran *Baleadas*, with Avocado

- Argentina: Hearts of Palm, Avocado and Tomato Salad
- Brazil: *Crème de abacate*
- Chile: Popular dish: Avocado with celery slices
- Colombia: *Aji de Aguacate*, *Crema de Aguacate*
- Peru: *Causa Limeña*
- Venezuela: *Guasacaca*
- Puerto Rico: Salted Codfish Salad with Avocado
- Cuba: Avocado Salad
- Dominican Republic: Avocado – topped bread

4. Suggestions for Working with LA Consumers

- a. Areas to Emphasize
 - Continued consumption of fruits, vegetables, dark leafy greens, healthy culturally popular foods
 - Plant based proteins
 - Maintain calorie and energy expenditure balance, aim for a healthy weight
 - Use monounsaturated fat sources, e.g.,
 - mashed avocado instead as a spread instead of cream based toppings (crema)
 - olive or avocado oil in place of butter, lard
- b. Areas to Decrease
 - Consumption of saturated fats (e.g., use broth in mashed beans instead of lard)
 - Multiple high calorie combinations in one meal (e.g., have plantains OR rice)
 - High calorie, high saturated fat, and high sodium and refined foods and snacks
 - Large portion sizes
- c. Strategies
 - Focus on key populations: children (for development of lifelong healthy food preferences), persons at-risk for CVD, Diab, HBP, females
 - Identify 1-3 key messages
 - Work with media, social media
 - Create materials for low literacy/limited language proficiency populations
 - Work with focus groups to develop pictorial, easy-to-read messages
 - Test materials that use pictorial messages and for ease of comprehension
- d. Collaborate with other organizations to promote healthy behaviors
 - Coordinate messaging to promote physical activity and healthy food choices
 - E.g., Weekly food and nutrition message played before dance music to promote healthy eating and physical activity.

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