



Avocado and the Health of the Latino Population

Presented by: Judith Rodriguez, PhD, RDN
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Medellin, Colombia
25 September 2019

Session support:

- » Hass Avocado Board

Unaffiliated with session:

- » International Confederation of Dietetic Associations, Board of Directors
- » *Topics in Clinical Nutrition*, Editorial Board and Reviewer

Disclosure Statement >

Attendees will summarize the

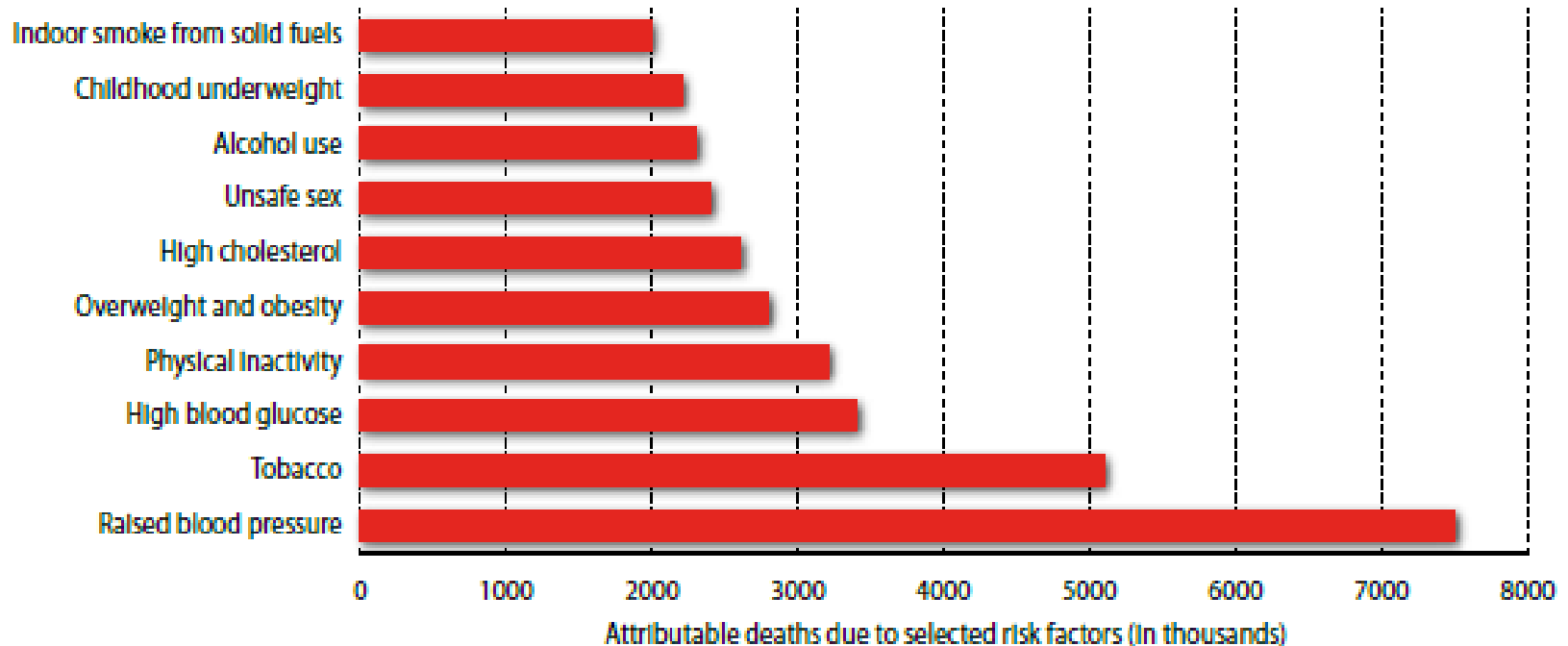
- > Health & Nutrition Status of Latino/a (LA) Population
- > Avocado: LA Research
- > Avocado: Diet and Cuisine
- > Suggestions for Working with LA Consumers

Objectives



Figure 29 Ranking of 10 selected risk factors of cause of death (2).

GLOBAL



Latinos: Health Status



Undernutrition

- Anemia
- Stunting
- Underweight
- Wasting

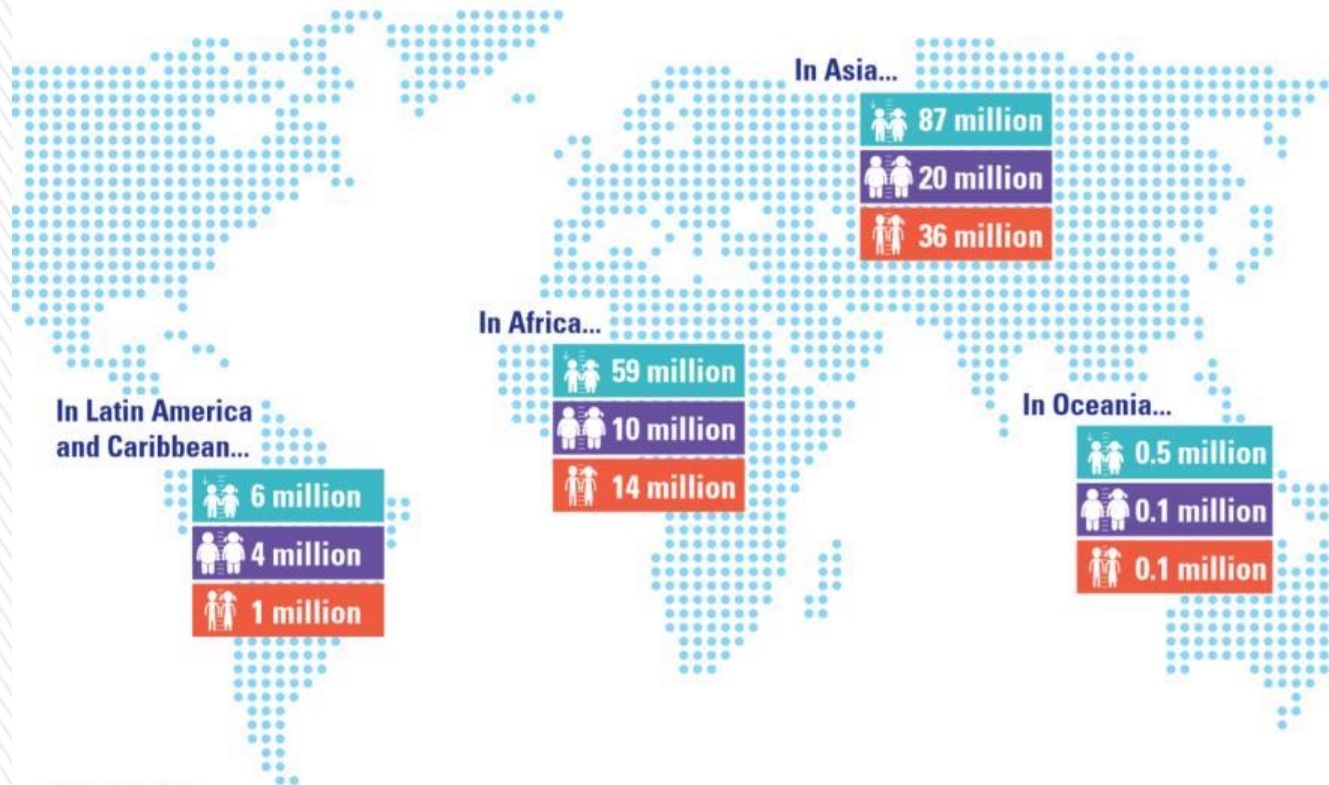
Overnutrition

- Obesity
- Overweight

Double Burden



Key findings of the 2017 edition



Worldwide...



155 million
STUNTED

Stunting affected an estimated 22.9 per cent or 154.8 million children under 5 globally in 2016.



41 million
OVERWEIGHT

An estimated 6.0 per cent or 40.6 million children under age 5 around the world were overweight in 2016.



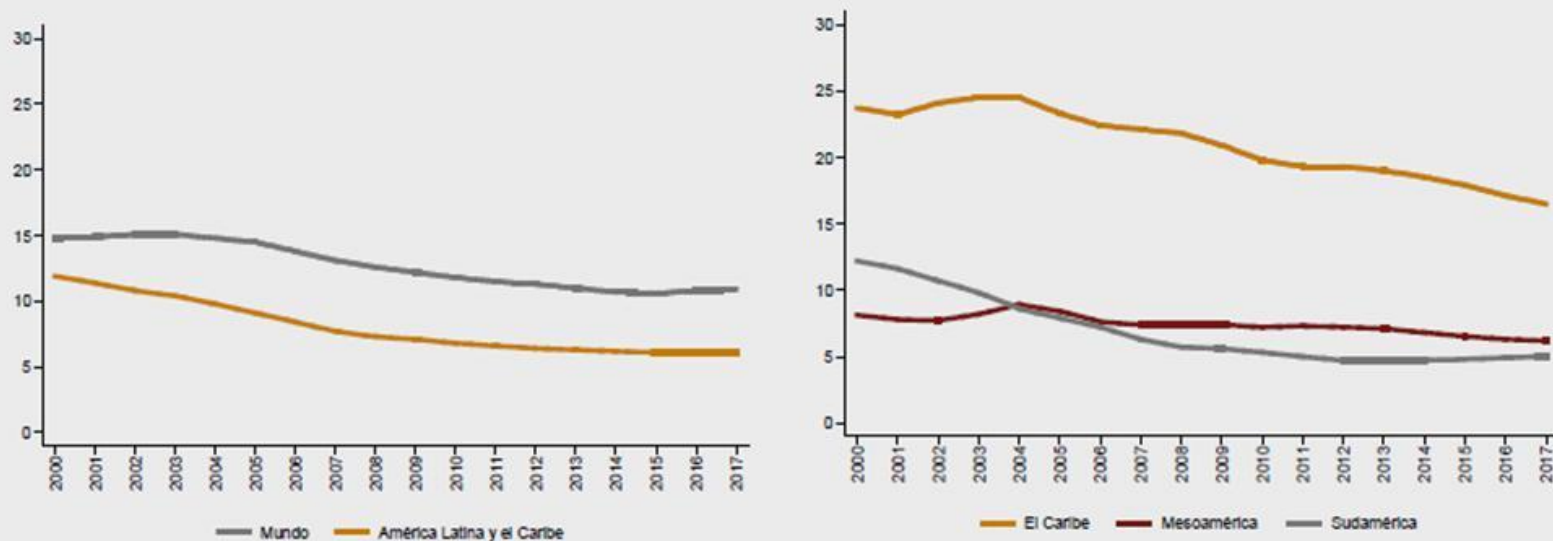
52 million
WASTED

In 2016, wasting continued to threaten the lives of an estimated 7.7 per cent or nearly 52 million children under 5 globally.

These new estimates supersede former analyses and results published by UNICEF, WHO and the World Bank Group.



FIGURA 1
EVOLUCIÓN DE LA SUBALIMENTACIÓN EN EL MUNDO, AMÉRICA LATINA Y EL CARIBE Y SUBREGIONES,
PREVALENCIA (%), 2000-2017 VALORES ANUALES

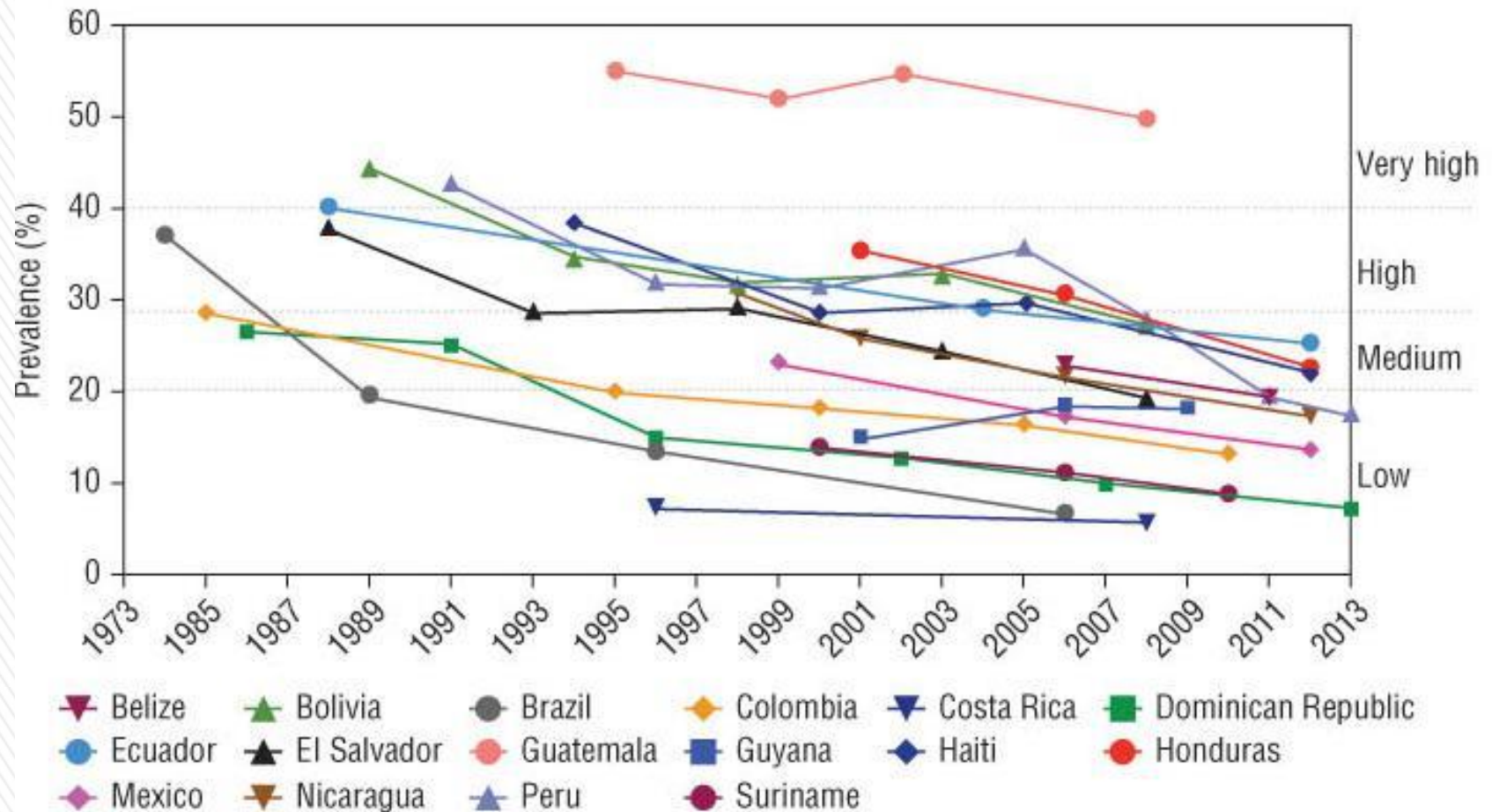


Fuente: FAO, FIDA, UNICEF, WFP y OMS, 2018. El estado de la seguridad alimentaria y la nutrición en el mundo. Fomentando la resiliencia climática en aras de la seguridad alimentaria y la nutrición.

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

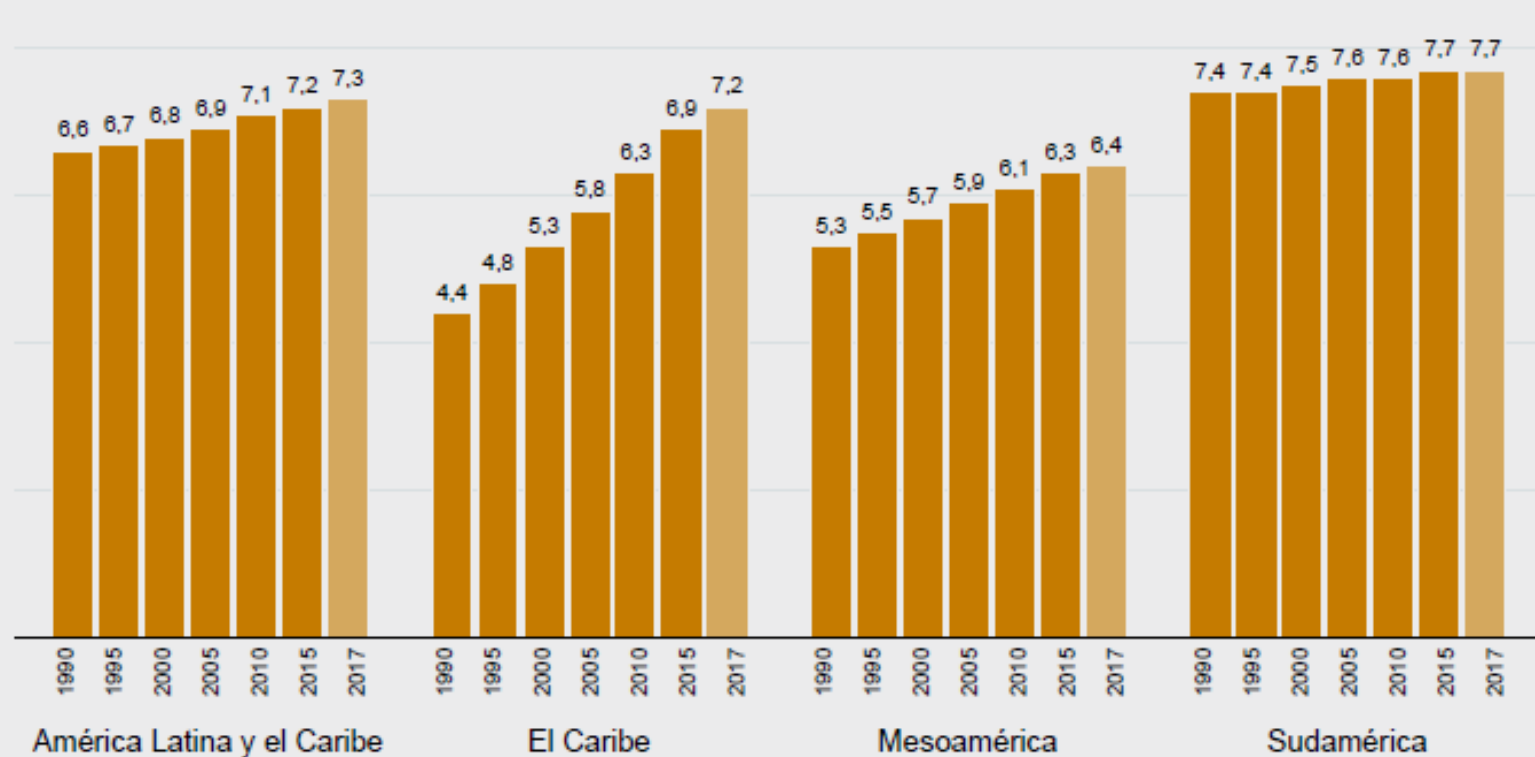


FIGURE 1. Trends in the prevalence of stunting in children under 5 years old in countries with available, nationally representative data,^a Latin America and the Caribbean, 1974–2014



Latinos: Health Status >

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.*

Latinos: Health Status

Figure 41 World map showing the prevalence of overweight * in males (*BMI ≥ 25 kg/m²).

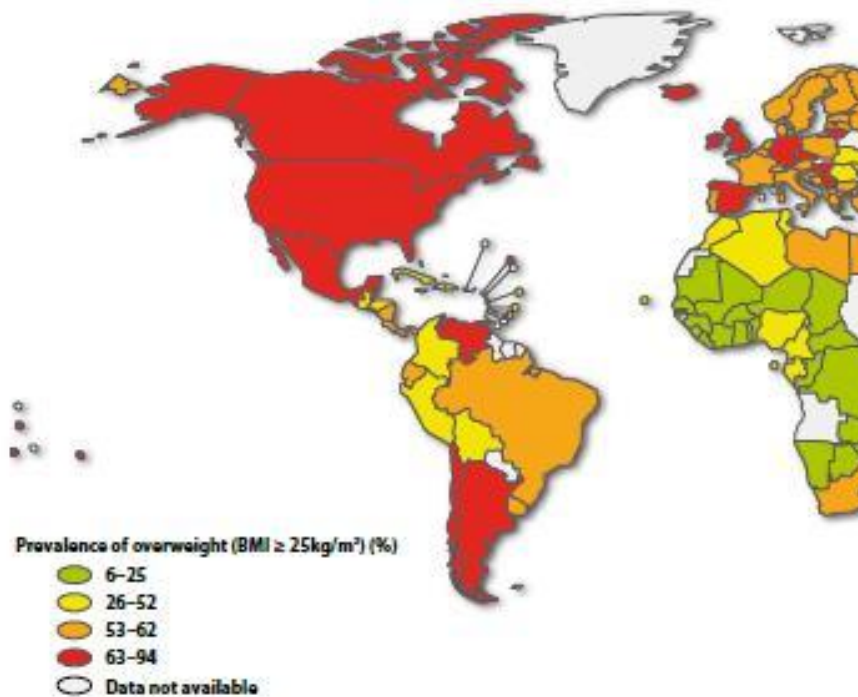
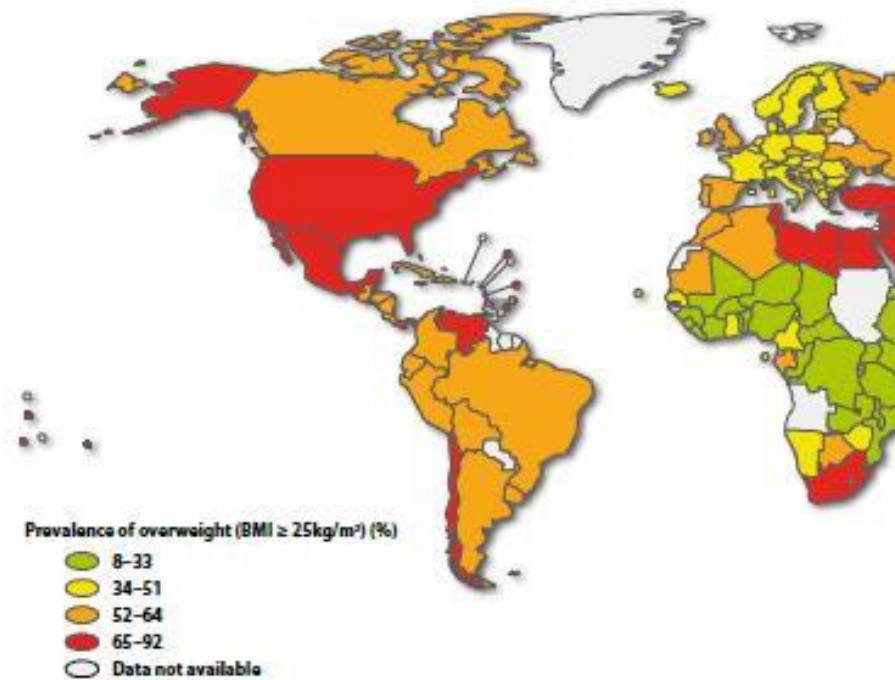


Figure 42 World map showing the prevalence of overweight * in female (*BMI ≥ 25 kg/m²).



Latinos: Health Status



World Health Organization. (2011) Global Atlas on Cardiovascular Disease Prevention and Control. Eds. Mendis, S. Puska, P. Norrving, B. Geneva pp. 33

☐ ~ 57% overweight

☐ Highest obesity in adults:

ES (33%), PA(30.1%) women; UR(23.3%), CH(22.0%) men.

☐ Highest obesity in children:

☐ CH, UR, CR >12% girls; UR (18.1%), CH (11.9%), MX (10.5%) boys

Latinos: Health Status



CVD major cause of death

» Risk factors

- > Diabetes
- > Obesity
- > Overweight
- > Low physical activity
- > Smoking



» Associated dyslipidemias

- > Low HDL (“good”)
- > High LDL (“bad”)
- > High levels of triglycerides

(Lanas, Seron, Lanas, 2013, Chile)

Research



Silva Caldas et al

- » 8 Study Review: Mechanisms Involved in Cardioprotective Effect of AVD Consump
- » Oleic acid; no consensus on amt of AVD

17/Intl J of Food Properties (BZ)

Research



Anderson Vazquez

- » Effect of Consump of AVD on Lipid
- » TG decr 10.3%, HDL incr 6.3%

09/Anales Venezolanos de Nutr (VZ)

Research



Diaz Perilla

- » *Efecto de la Adicion de Aguacate*
- » TC (14%) & LDL (16%) decr, HDL incr (19%), slight wt gain

04/Universitas Scientarium (CO)

Research



Carranza-Madrigal

» Effects of Veg vs Veg w/AVD

» AVD signif decrease in LDL,

97/Arch Med Res (MX)

Research



Alvizouri-Munoz

- » AVD as MUFA on Plasma Lipids
- » MUFA rich & lo sat: lower LDL and chol

92/Arch Med Res (MX)

Lopez-Ledesma

- » Hi MUFA w/AVD for Hyperchol
- » Hi lipid w/ MUFA AVD impr lipids

96/Arch Med Res (MX)

Research



Lerman-Garber

» Hi MUFA w/AVD in NIDDM Pts

» Hi MUFA greatest decr. TG

96/Arch Med Res (MX)

Research



Author	Tot Chol	LDL	Trig	HDL	Comments
Silva Caldas (BZ 17)	Decr	Decr	Decr	Incr	Oleic Acid, no consensus on amt
Anderson Vazquez (VZ 09)	Decr	Decr**	Decr	Incr	
Diaz Perilla (CO 04)	Decr	Decr	Incr	Incr	Wt gained
Carranza-Madrigal (MX 97)	Decr	Decr	Incr but less w/AVD	Decr but less w/AVD	Rec w/AVD Decr CHO, PUFA
Alvizouri-Munoz (MX 94)	Decr	Decr*	Decr	Slight Decr	
Lopez-Ledesma (MX 96)	Decr*	Decr*	Decr	Incr	
Lerman-Garber (MX 96)	Decr*	NS	Decr*	No chg	Glycemic control similar w/both

*AVD grp greater Decr ** Decr for both grps

Research



Nutrition Transition

- » Increase of ultra-processed high fat, sodium, and imported foods
- » Related to  in overweight, NCDs

09/TICN (BZ)



Research

FAO and PAHO, 2017 file:///C:/Users/jrodr_000/Documents/Projects/Avocado/2019%20presentation/Panomaram%20of%20LA%20Health%202017.pdf
[Watkins, J., Christie, C., Rodriguez, J., Torres, M., Brown, K.](#) The Dynamics of Globalization and Non-Communicable Disease Risk in a Sample of Culturally Diverse Belizeans *International Journal of Interdisciplinary Social Sciences*, 4(3):.35-46.
[Khan, S., Watkins, J., Rodriguez, J.C., Christie, C.](#) Health Implications Associated with Food Intake Patterns of Belizeans. *Topics in Clinical Nutrition*, 24 (1):73-81.

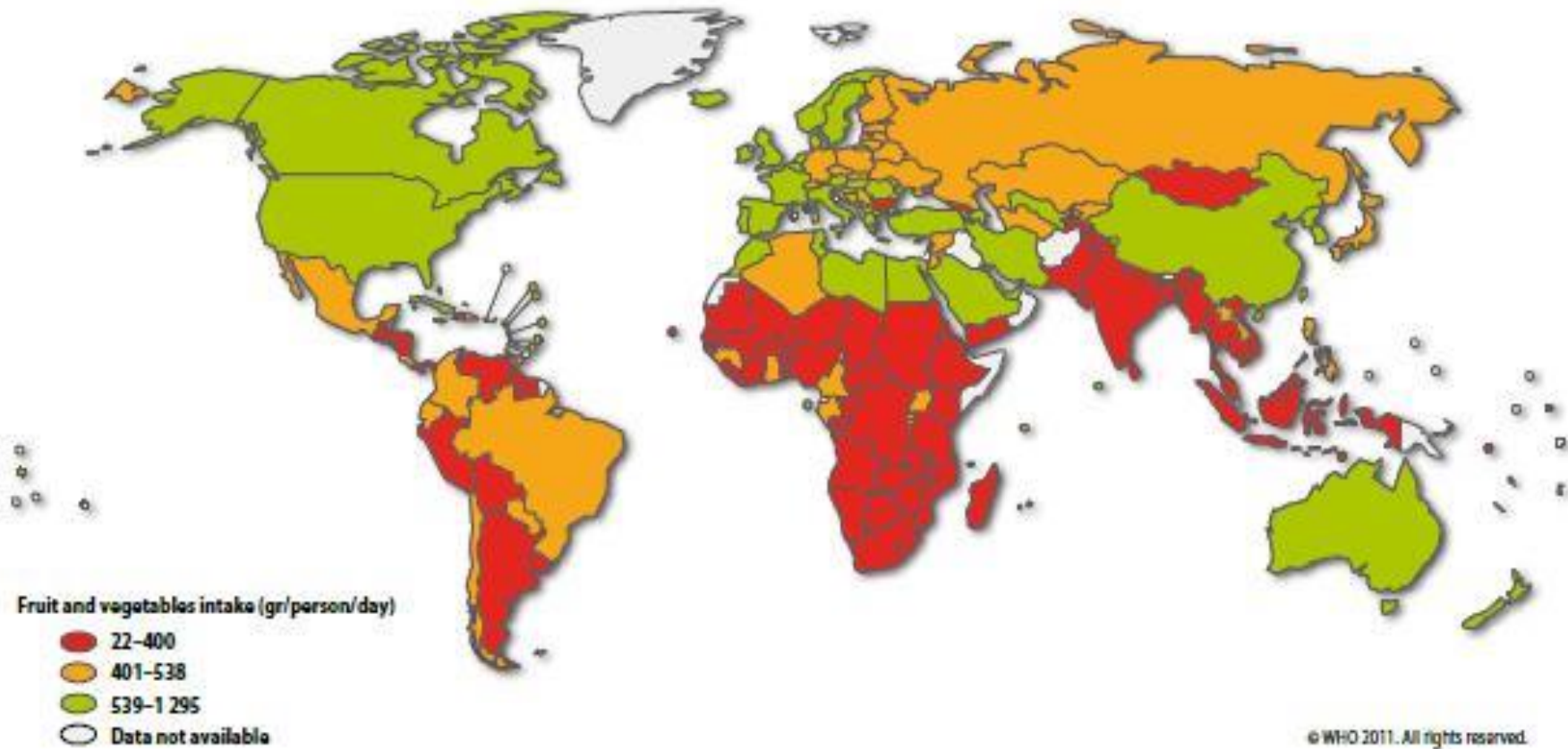
FIGURAS GUÍAS ALIMENTARIAS DE AMÉRICA



Diet and Cuisine



Figure 40 World map showing fruits and vegetable intake (grams per person per day) (ii).



Mexico

- 24% CVD & 15% Diab mortality
- 72.1% overwt or obese
- 6 of 10 M/8 of 10 F: abdominal obesity



Corn Salad, Guacamole ➤

Tijerina Wall, MV Mexico, an Overview of its current Nutrition and Health Status. Adelante LAHIDAN. Sp 2019

Encuesta Nacional de Nutricion y Salud 2016 <http://oment.uanl.mx/prevalencia-de-obesidad-abdominal-es-mayor-en-mujeres-ensanut-mc-2016/>

<http://littlespicejar.com/mexican-street-corn-salad-with-black-beans-and-avocados/>

<https://www.mylatinatable.com/homemade-mexican-guacamole/>

Costa Rica

- *Patacones with pico de gallo & beans*

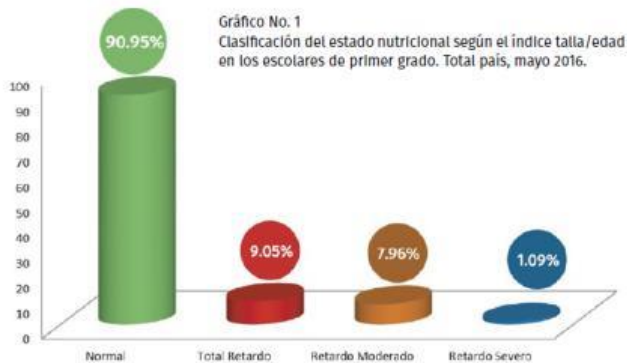
CÍRCULO DE LA ALIMENTACIÓN SALUDABLE



<http://www.fao.org/nutrition/education/food-based-dietary-guidelines/regions/countries/costa-rica/es/>
<https://mytanfeet.com/about-cr/costa-rican-dishes/>
<https://puravidaspa.com/2017/03/02/recipe-patacones-mashed-beans-guacamole-pico-de-gallo/>



El Salvador



Guatemala

➤ 17% CVD & 8% Diab mortality



Honduras

➤ 25% CVD & 2% Diab mortality



Baleadas



<http://www.fao.org/nutrition/education/food-based-dietary-guidelines/regions/countries/guatemala/es/>

<https://www.allrecipes.com/recipe/255917/honduran-baleadas/> <http://www.fao.org/nutrition/education/food-dietary-guidelines/regions/countries/honduras/en/>

World Health Organization/WHO. Guatemala. www.who.int/nmh/countries/gtm_en.pdf

World Health Organization/WHO. Honduras. www.who.int/nmh/countries/hnd_en.pdf



➤ 28% CVD & 3% Diab mortality



» Hearts of palm, avocado and tomato salad

Argentina

Argentina first launched its food-based dietary guidelines and food guide in 2000. They were revised in 2015.

<http://www.fao.org/nutrition/education/food-based-dietary-guidelines/regions/countries/argentina/es/>

<https://www.weightwatchers.com/us/recipe/argentinian-hearts-of-palm-salad/5626a63f3d92b3c10eb8dee0>

- ↓ Stunting in children
- Dietary Guidelines
- *Crème de abacate*
(Avocado Cream Dessert)

<http://www.fao.org/nutrition/education/food-based-dietary-guidelines/regions/countries/brazil/es/>
Galicia, 2016

Brazil

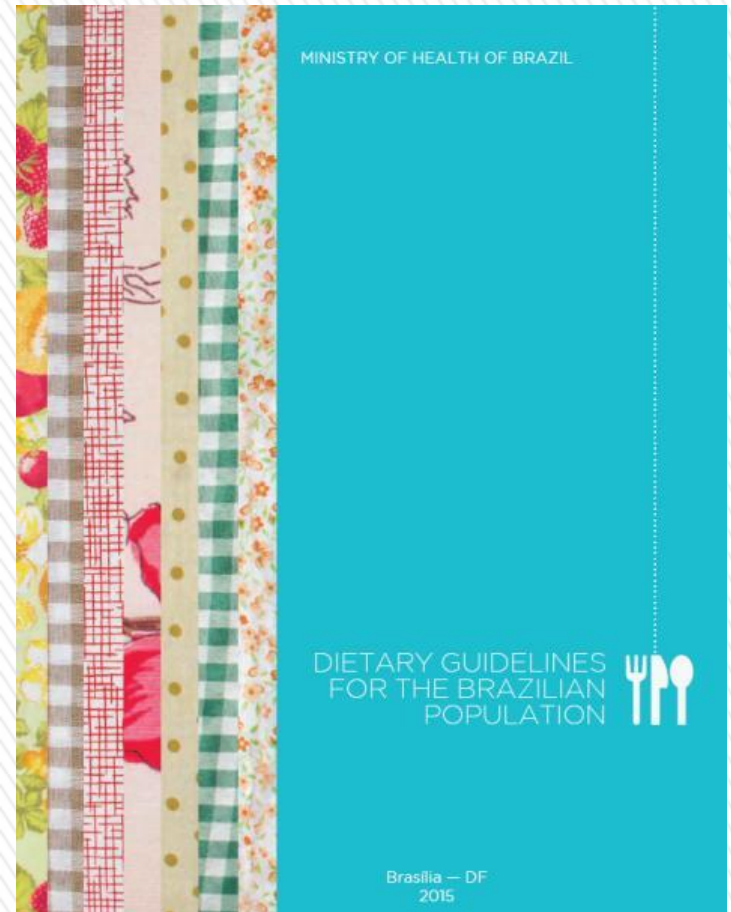




FIGURA 2. SISTEMA DE ETIQUETADO CHILENO: SELLOS DE ADVERTENCIA PARA PRODUCTOS QUE SUPERAN EL CONTENIDO MÁXIMO DE CIERTOS INGREDIENTES CRÍTICOS. CHILE, 2016³⁷

A front-of-pack labelling system for food and beverages for Mexico: a strategy of healthy decision-making. Salud Publica Mex. 2018;60:479-486.

Chile

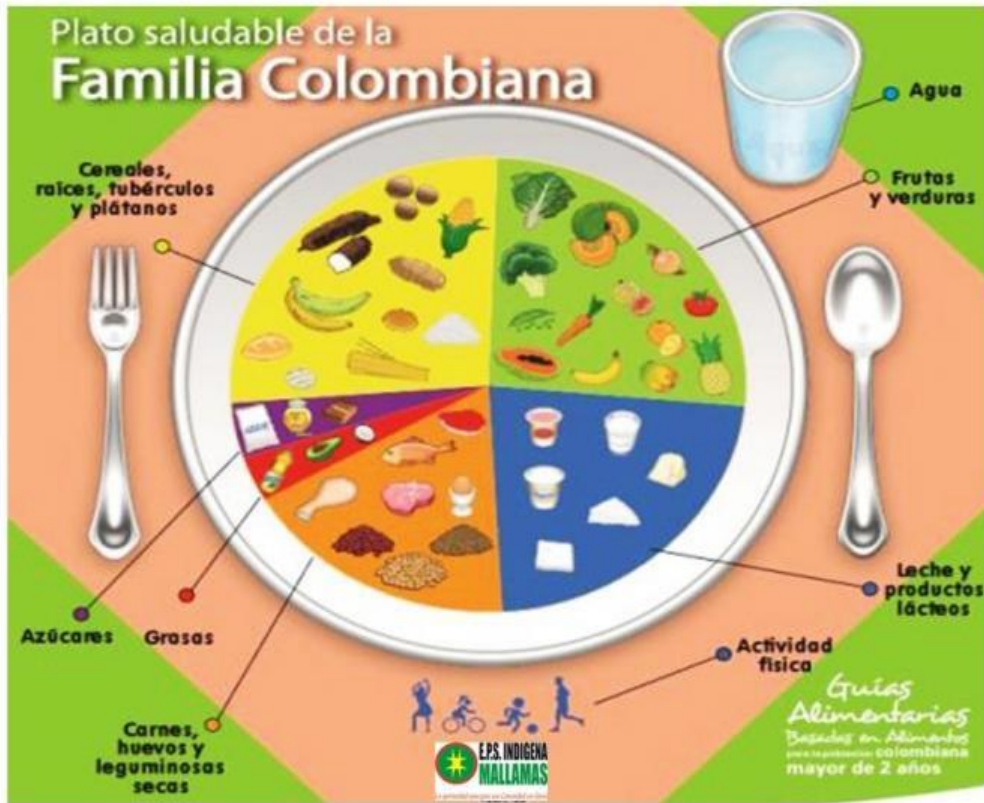
- 24%M; 20%F CVD & 4%M; 5%F Diab mortality

Palta Reina



<http://www.fao.org/nutrition/education/food-based-dietary-guidelines/regions/countries/chile/es/>
<https://www.196flavors.com/chile-palta-reina/>
 World Health Organization/WHO. Argentina.
www.who.int/nmh/countries/arg_en.pdf

Colombia



➤ *Aji de aguacate*



Note: Avocado under fats

<https://www.mallamaseps.com.co/index.php/noticias/item/158-todo-lo-que-debes-saber-sobre-las-vacunas>

<https://www.icbf.gov.co/programas-y-estrategias/nutricion/guias-alimentarias-basadas-en-alimentos-para-la-poblacion>

<https://www.mycolombianrecipes.com/everything-avocado>



Peru



➤ *Causa limeña*



Guías alimentarias para la población peruana

<https://www.recetasgratis.net/receta-de-causa-limena-31268.html>

<https://www.gob.pe/institucion/minsa/informes-publicaciones/256988-guias-alimentarias-para-la-poblacion-peruana>

<https://web.ins.gob.pe/es/alimentacion-y-nutricion/vigilancia-alimentaria-y-nutricional/sala-nutricional>

Venezuela

- Guasacaca
- In arepas

<https://mommyshomecooking.com/venezuelan-guasacaca/>



(VENEZUELAN SPICY AVOCADO SALSA)



<https://www.panningtheglobe.com/reina-pepiada-arepas-chicken-avocado/>



Caribbean

- Puerto Rican salted cod salad
- Cuban avocado salad
- Dominican avocado – topped bread



<https://www.dominicancooking.com/82-pan-con-aguacate-avocado-stuffed-bread.html>
<https://insightcuba.com/blog/2012/10/07/cuban-avocado-salad-recipe>
<https://www.delishdlites.com/avocado-recipes/gazpacho-puerto-rican-salt-cod-salad/>

Areas to Emphasize



Fruits & vegetables



Plant based proteins, e.g., beans



Monounsaturated fats, e.g.,




- mashed avocado e.g., mayo, *crema*, *lard*
in refried beans

- olive, corn oil in place of butter, lard

Suggestions



Areas to Decrease

-  Processed, high calorie/fat/sodium foods
-  Large portions
-  Many CHOs in one meal (e.g., plantains OR rice)

Suggestions



➤ Pop.: At-risk for **CVD**, Db, HBP;
children, females

➤ 1-3 messages

✓ Health promotion

✓ Versatility

✓ Healthy fats

Suggestions



- Materials for low literacy pop.
- Focus groups - test written & pictorial messages
- Collaborate – media, other orgs.

Henao, JC; Rodriguez J ; Wilburn ST. Salsa y Salud: increasing healthy lifestyle awareness through a radio-based initiative. *Journal of nutrition education and behavior (J Nutr Educ Behav)* 2006 Jul-Aug; 3

Suggestions



AVOCADO: Media Superstar

health/benefits, delicious, sustainability, nutrients/fats, weight loss/diet, vegan

10 recetas con aguacate para bajar de peso

Por HolaDoctor - 01 de mayo 2017



El aguacate contiene grasas monoinsaturadas y ácido oleico, además de fibra que da saciedad. En investigaciones realizadas por Hass Avocado Board (HAB) se ha visto que la dieta con aguacate controla el azúcar en la sangre, además puede mejorar la presión arterial y la salud cardiovascular.



Dieta del aguacate: Diseñada especialmente para que las latinas pierdan hasta 10 libras en 2 semanas

[7 quemas.mamaslatinas.com](http://quemas.mamaslatinas.com)

Estoy que brinco de la emoción, porque

INICIO / MENU / DIETA DEL AGUACATE PARA PERDER PESO



Además de bajar de peso, puedes reducir el colesterol en la sangre con tan solo comer aguacate. / Foto: Pixabay

Dieta del aguacate para perder peso

"Comí aguacate durante una semana y esto es lo que pasó"

Desde la reducción del colesterol a la pérdida de peso, sus beneficios están documentados. Colleen De Beifeonda los consumió durante una semana y ahora cuenta su experiencia



Imagen: el comensal (Pixabay)

Suggestions

https://www.elconfidencial.com/alma-corazon-vida/2017-09-21/comer-aguacate-todos-los-dias-y-pasa-esto_1445682/

<https://www.eluniversal.com.mx/menu/dieta-del-aguacate-para-perder-peso>

<https://holadoctor.com/es/%C3%A1lbum-de-fotos/10-recetas-para-bajar-de-peso-con-aguacate>

<https://www.pinterest.es/pin/158470480612374922/?autologin=true>

<https://www.linkfluence.com/blog/the-avocado-part-one-a-star-on-the-web>



Key Points:

- “Double Burden” & “Transition”
- CVD mortality
- Evidence: AVD & calorie balance
- Encourage avocado; already part of cultural cuisines

Suggestions



Questions?

Thank you

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