

## Epidemiology of obesity

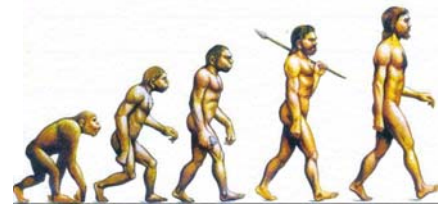
Where do we stay,  
where do we go?

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# 1'100'000'000

Estimated global number of overweight  
and obese (BMI  $\geq 25$  kg/m<sup>2</sup>) individuals  
in 2004

Source: International Obesity Task Force (IOTF), <http://www.iotf.org/>

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including

# 312'000'000

Estimated global number of obese  
(BMI  $\geq 30$  kg/m<sup>2</sup>) individuals in 2004

Source: International Obesity Task Force (IOTF), <http://www.iotf.org/>

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# 1 of 10 children is overweight or obese

(2004)

Source: International Obesity Task Force (IOTF), <http://www.iotf.org/>

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# The only region where obesity is not common is sub- Saharan Africa

Source: International Obesity Task Force (IOTF), <http://www.iotf.org/>

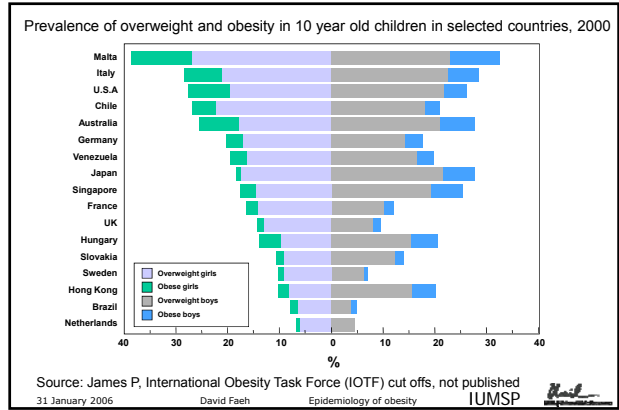
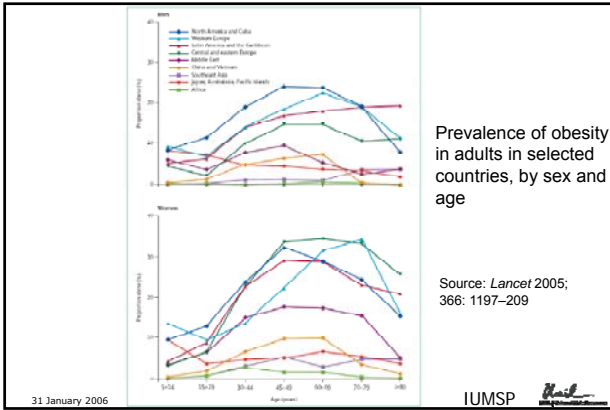
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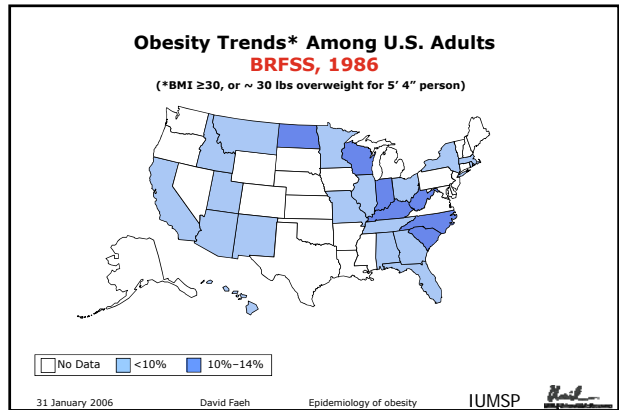
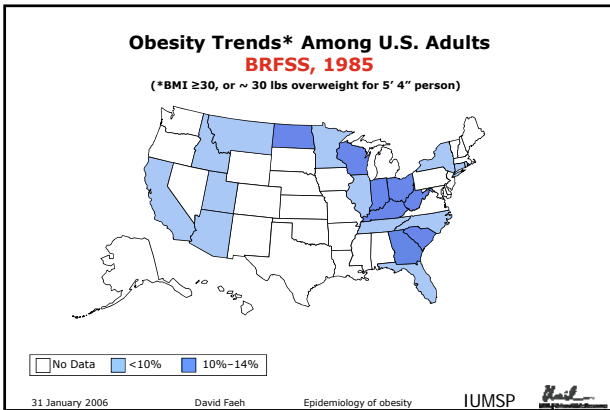
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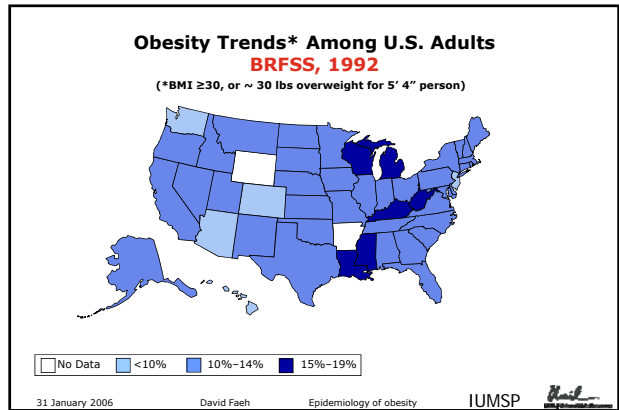
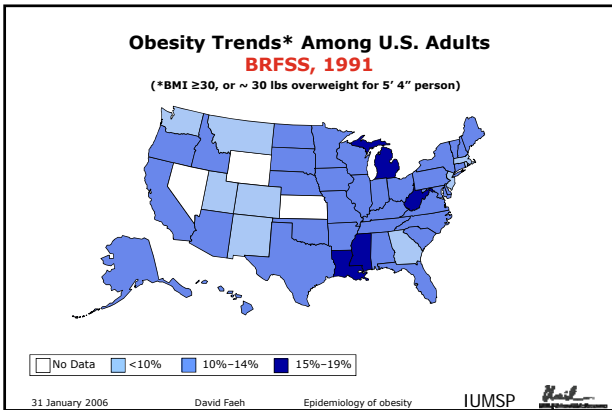
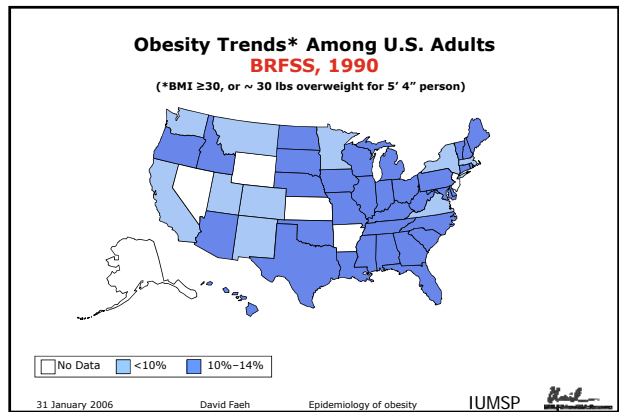
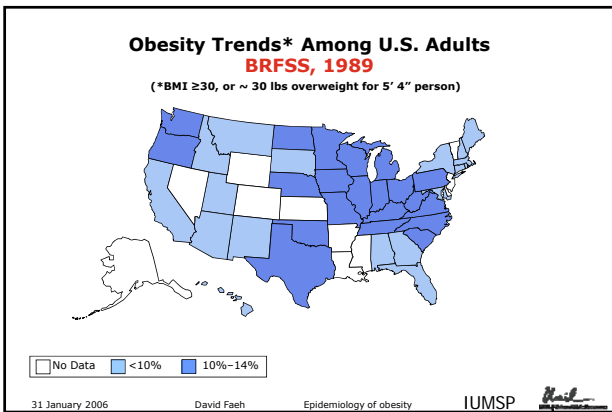
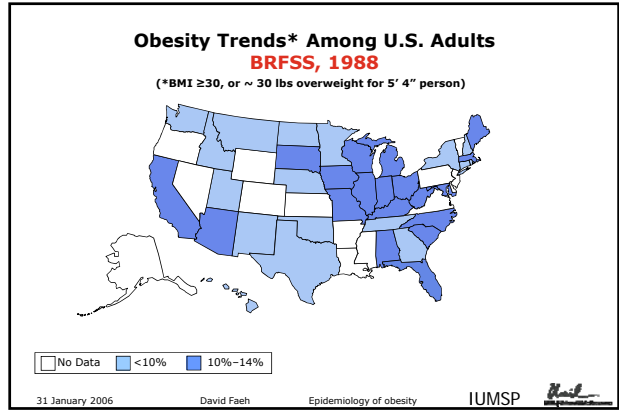
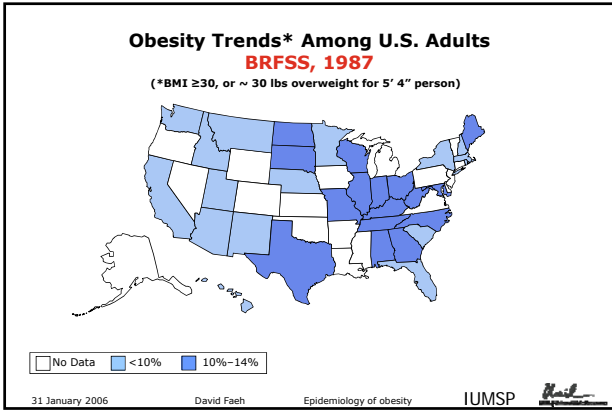


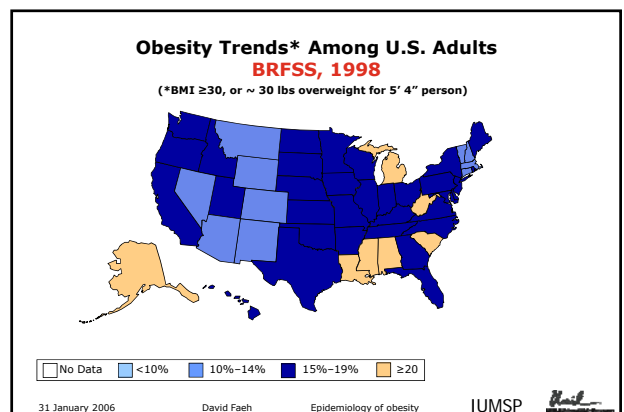
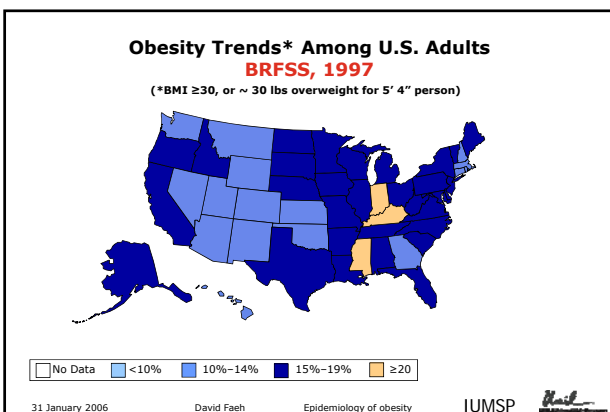
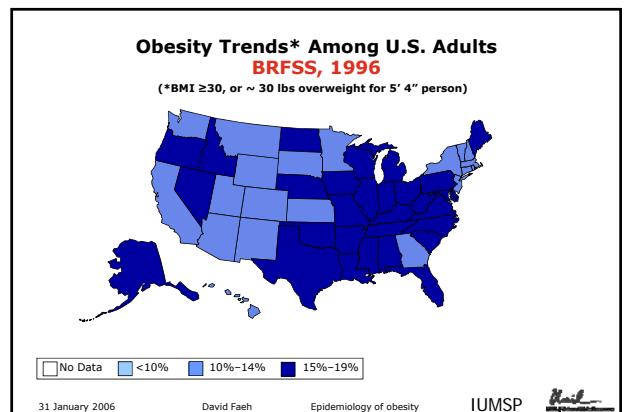
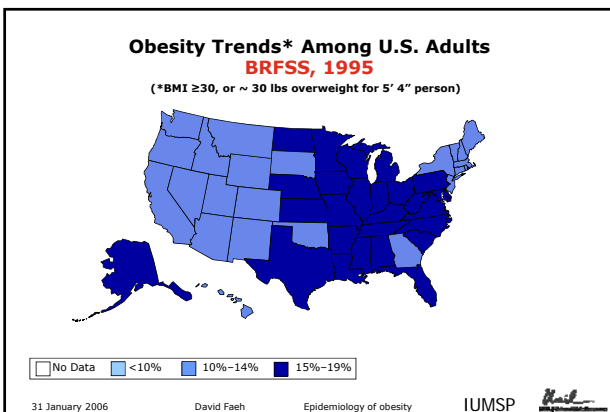
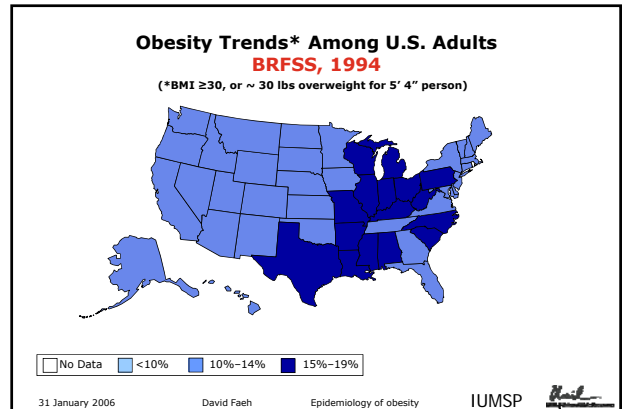
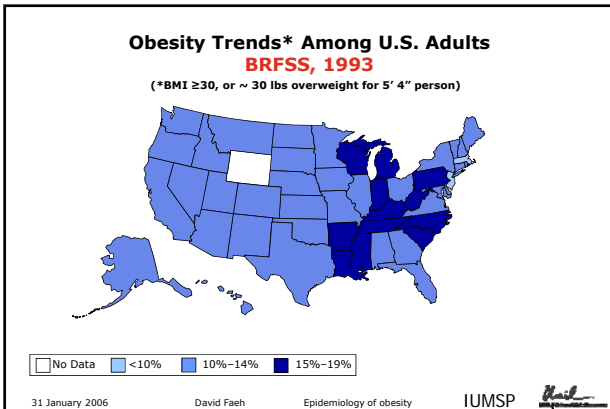


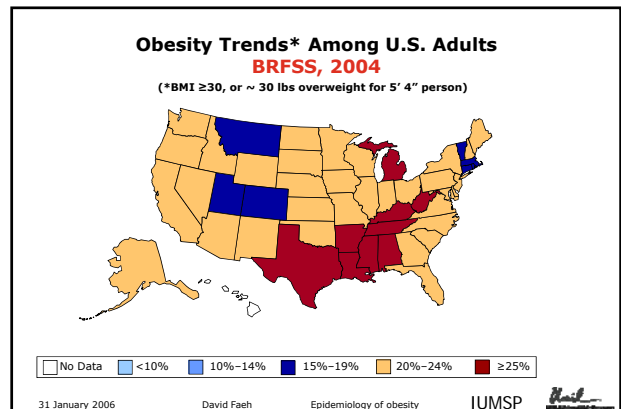
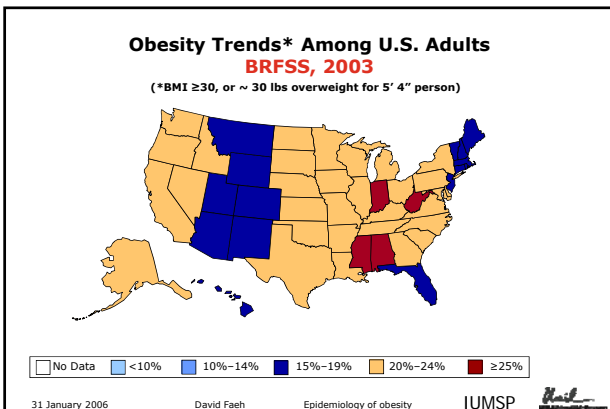
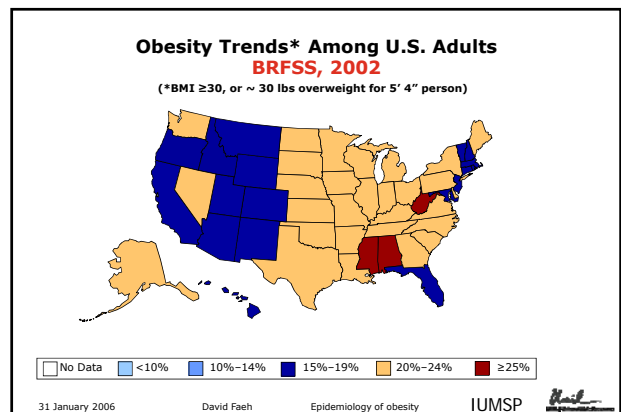
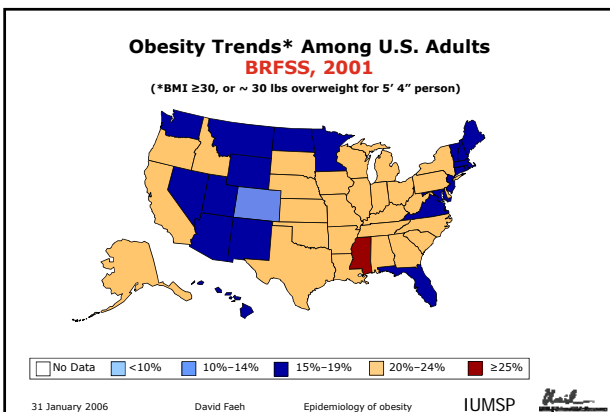
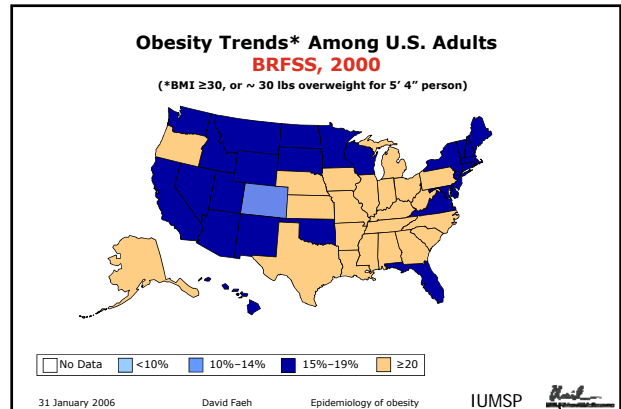
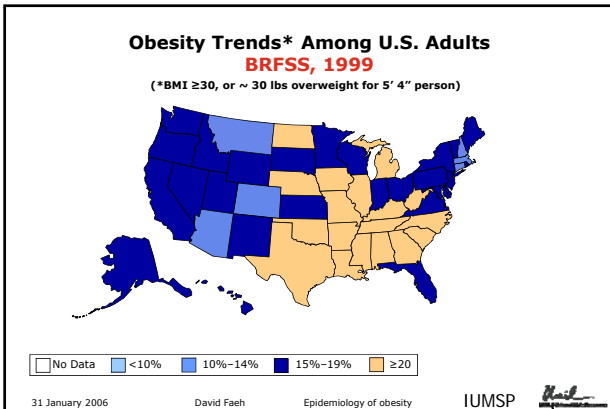
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    - Outlook
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    - Seychelles
  - **Switzerland**
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  - **Factors associated with obesity**
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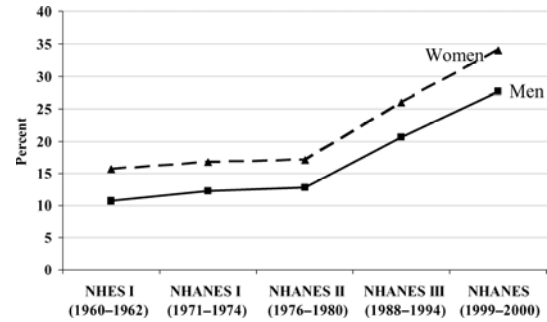






## Citations

- Source: Behavioral Risk Factor Surveillance System (BRFSS), Centers for Disease Control and Prevention (CDC).
- Source: Mokdad A H, et al. JAMA 1999;282:16.
- Source: Mokdad A H, et al. JAMA 2001;286:10.
- Source: Mokdad A H, et al. JAMA 2003;289:1.



Adult obesity trends by gender, United States, 1960-2000 (JAMA 288(14):1723-27). NHANES, National Health and Nutrition Examination Survey.

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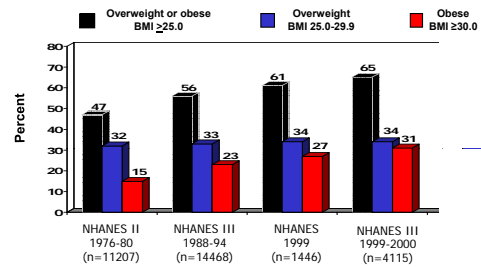
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## Present and future prevalence of overweight and obesity in the U.S.



Age-adjusted by the direct method to the year 2000 U.S. Bureau of the Census estimates using the age groups 20-34, 35-44, 45-54, 55-64, and 65-74 years.

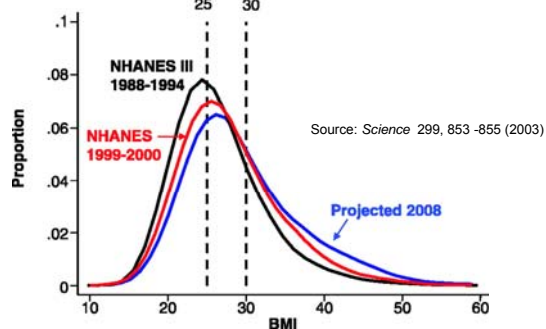
Source: International Obesity Task Force (IOTF)

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BMI distributions were estimated from the National Health and Nutrition Examination Surveys from 1988-94 (NHANES III) and from 1999-2000. Information from these distributions was used to predict the distribution for BMI in 2008.

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## Prevalence of overweight and obesity in the U.S. in 2010

### USA in 2010

- **75%** overweight (BMI ≥25kg/m<sup>2</sup>)

including

- **40%** obese (BMI ≥30kg/m<sup>2</sup>)

Source: Centers for Disease Control and Prevention (CDC), <http://www.cdc.gov/>

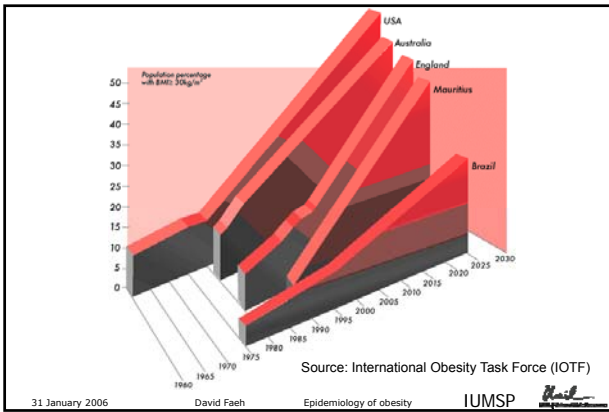
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| Country                  | Year of Data Collection | Population | Age Category | Males % BMI 25-29.9 | Females % BMI 25-29.9 | %DM  |      |
|--------------------------|-------------------------|------------|--------------|---------------------|-----------------------|------|------|
| Albania <sup>a</sup>     | 2001                    | 1120       | 25+          | 56.5                | 22.8                  | 42.3 | 33.5 |
| Armenia                  | 2000                    | 1089       | 15-49        | 15.4                | 10                    | 23.3 | 7.3  |
| Australia                | 1999                    | 841        | 25-64        | 40                  | 10                    | 27   | 14   |
| Australia                | 2000                    | 11067      | 25+          | 48.2                | 19.3                  | 29.8 | 22.2 |
| Argentina                | 1997                    | n/a        | 20-79        | 38.9                | 28.4                  | 29.2 | 25.4 |
| Bahamas                  | 1998-99                 | 1771       | 15-64        | 29.1                | 13.9                  | 25.6 | 26   |
| Bahrain                  | 1998-9                  | 3201       | 19+          | 35.7                | 23.3                  | 29.3 | 34.5 |
| Bangladesh               | 1999-2000               | 4496       | 15-49        | 15.4                | 3.7                   | 0.7  | 0.7  |
| Barbados                 | 1991                    | n/a        | 25-74        | 15                  | 10                    | 28   | 31   |
| Belgium                  | 84-7                    | 21358      | 35-59        | 49                  | 14                    | 29   | 13   |
| Benin                    | 2001                    | 2874       | 15-49        | 15.4                | 11.2                  | 4.8  | 4.8  |
| Bolivia                  | 1998                    | 3807       | 15-49        | 15.4                | 26.2                  | 11.2 | 11.2 |
| Brazil                   | 1997                    | n/a        | 20+          | 31                  | 8.9                   | 26.6 | 12.5 |
| Brunei Darussalam        | 1997-99                 | n/a        | Adults       | 44                  | 12.9                  | 45   | 13.9 |
| Bulgaria <sup>a</sup>    | 1984                    | 1986       | 25-74        | 31.4                | 16.3                  | 20.9 | 20.9 |
| Burkina Faso             | 98-99                   | 3277       | 15-49        | 15.4                | 4.8                   | 0.9  | 0.9  |
| Cambodia                 | 2000                    | 2368       | 15-49        | 15.4                | 8.3                   | 0.8  | 0.8  |
| Cameroon <sup>a</sup>    | 2000                    | 3668       | 15+          | n/a                 | 5.1                   | 13.8 | 13.8 |
| Canada <sup>b</sup>      | 2000/01                 | 30801      | 20-64        | 40                  | 16                    | 25   | 14   |
| Central African Republic | 1994-95                 | 2025       | 15-49        | 15.4                | 8.5                   | 1.1  | 1.1  |
| Chad                     | 1995/7                  | 3549       | 15-49        | 15.4                | 4.3                   | 0.9  | 0.9  |
| Chile <sup>a</sup>       | 1992                    | 3120       | 25-64        | 35.4                | 16.7                  | 23   | 23   |
| China <sup>a</sup>       | 1998-2000               | 2776       | 20-84        | 30.2                | 2.44                  | 28.9 | 6.5  |
| Colombia                 | 2000                    | 3970       | 15-49        | 15.4                | 30.3                  | 16.5 | 16.5 |
| Congo                    | 1998                    | 173        | 15-49        | 15.4                | 15.9                  | 4.4  | 4.4  |
| Congo <sup>a</sup>       | 1996                    | 3829       | 15+          | n/a                 | 2.3                   | 8.8  | 8.8  |
| Cook Island              | n/a                     | n/a        | n/a          | n/a                 | 39.6                  | 38.8 | 38.8 |
| Costa Rica <sup>a</sup>  | 2000                    | 1332       | 20-64        | 67.9                | 60.4                  | 40.4 | 40.4 |
| Côte d'Ivoire            | 1999/0                  | 1299       | 15-49        | 15.4                | 13.5                  | 4.5  | 4.5  |
| Croatia                  | 1998/97                 | 6840       | 15-49        | 15.4                | 48.1                  | 31.1 | 15.2 |
| Cuba                     | 1995                    | 4197       | 20-64        | 25.1                | 7.1                   | 26.7 | 10.2 |
| Cyprus                   | 1999-2000               | 1019       | 25-64        | 46                  | 26.8                  | 34.3 | 23.7 |
| Czech Republic           | 1997/8                  | 1068       | 25+          | 48.5                | 24.7                  | 31.4 | 30.2 |

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|                      |           |        |       |      |      |      |      |
|----------------------|-----------|--------|-------|------|------|------|------|
| Denmark <sup>a</sup> | 1992      | 1624   | 30-60 | 39.7 | 12.5 | 26   | 11.3 |
| Dominican Rep.       | 1996-8    | 6178   | 18-74 | 16.4 | 18.4 | 18.3 | 18.3 |
| Egypt <sup>a</sup>   | 2000      | 6231   | 15-49 | 15.4 | 38.8 | 22.4 | 22.4 |
| Egypt <sup>a</sup>   | 2000      | 12089  | 16+   | 43.2 | 22.2 | 32.6 | 22   |
| Ethiopia             | 2000      | 6493   | 15-49 | 15.4 | 2.1  | 0.2  | 0.2  |
| Eritrea              | 2002      | 8764   | 15-49 | 15.4 | 9    | 2    | 2    |
| Estonia              | 1997      | 1164   | 18-64 | 32   | 9.9  | 22.9 | 6    |
| Fiji                 | 1993      | 1189   | >19   | 21.1 | 6.6  | 28.1 | 19.3 |
| Finland              | 1997      | 4284   | 25-64 | 48   | 19.8 | 33   | 19.4 |
| France <sup>b</sup>  | 2003      | 25720  | 16+   | 37.4 | 11.4 | 23.7 | 11.3 |
| French Polynesia     | 1998      | 1273   | 18+   | 38.0 | 38.3 | 28.2 | 44.3 |
| Gabon                | 2000      | 2190   | 15-49 | 15.4 | 21.3 | 8.2  | 8.2  |
| Gambia               | 1996-7    | 6289   | 15+   | n/a  | 0.6  | 2.1  | 4.4  |
| Germany              | 2002      | 3807   | 25+   | 52.9 | 39.5 | 16.6 | 23.1 |
| Ghana <sup>a</sup>   | 1997      | 6306   | 20+   | 17.1 | 4.7  | 26.9 | 20.2 |
| Greece               | 1984-8    | 25723  | 18-64 | 61.1 | 27.6 | 36.8 | 38.1 |
| Guatemala            | 1998/9    | 2199   | 15-49 | 15.4 | 21.7 | 12.1 | 12.1 |
| Guinea               | 1998      | 2162   | 15-49 | 15.4 | 6.6  | 2.6  | 2.6  |
| Haiti                | 1994/5    | 1896   | 15-49 | 15.4 | 8.9  | 2.8  | 2.8  |
| Honduras             | 1998      | 885    | 15-49 | 15.4 | 23.8 | 7.8  | 7.8  |
| Hungary              | 1992-4    | 2559   | 19+   | 41.9 | 21   | 27.8 | 21.2 |
| Iceland              | 1991-4    | 6178   | 16+   | 47.3 | 17   | 35.2 | 18.3 |
| India                | 1999      | 177841 | 18+   | 4.4  | 0.3  | 4.3  | 0.6  |
| Indonesia            | 2001      | 12910  | 15+   | 7.3  | 1.1  | 14.2 | 3.8  |
| Israel               | 2000      | 2000   | 20-84 | 43.6 | 14.7 | 28.3 | 20.9 |
| Italy                | 2000      | 10146  | 20+   | 42   | 18   | 45   | 36   |
| Ireland              | 1997-99   | 1379   | 18-84 | 48.0 | 20.1 | 32.5 | 18.9 |
| Italy <sup>b</sup>   | 1999      | 18900  | 20+   | 41   | 9.6  | 26.2 | 9.9  |
| Jamaica              | 1991-1999 | 826    | 25-74 | 23.6 | 7.9  | 33.2 | 31.8 |
| Japan <sup>a</sup>   | 2000      | 8266   | 20+   | 23.9 | 2.9  | 17.4 | 3.3  |
| Jordan <sup>a</sup>  | 1994-6    | 2836   | 25+   | n/a  | 32.7 | 59.8 | 59.8 |
| Kazakhstan           | 1995      | 3538   | 15-49 | 15.4 | 43   | 21.9 | 16.7 |
| Korea                | 1993      | 2163   | 15-49 | 15.4 | 10.2 | 15.1 | 2.7  |
| Korea (South)        | 1998      | 8818   | 15-79 | 22   | 1.6  | 22.4 | 3    |
| Kuwait               | 1998-2000 | 9755   | 25+   | 27.5 | 22.8 | 32.8 | 29.9 |

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|                     |           |       |        |       |       |       |       |
|---------------------|-----------|-------|--------|-------|-------|-------|-------|
| Kyrgyzstan          | 1993      | 4053  | 18-49  | 26.4  | 4.2   | 24.3  | 10.7  |
| Latvia              | 1997      | 2292  | 18-64  | 41    | 6.8   | 33    | 17.4  |
| Lithuania           | 1998-2002 | 2445  | 25-64  | 36.3  | 7.5   | 26.3  | 19.3  |
| Lithuania           | 1997      | 2096  | 19-64  | 41.8  | 11.4  | 32.7  | 18.3  |
| Luxembourg          | 2006      | 506   | 16+    | 45.8  | 15.3  | 26.7  | 13.9  |
| Madagascar          | 1997      | 2854  | 15-49  | 15.4  | 3.3   | 0.4   | 0.4   |
| Malawi              | 2000      | 6488  | 15-49  | 15.4  | 9.5   | 1.5   | 1.5   |
| Malaysia            | 1996      | 20165 | 18+    | 20.1  | 4     | 21.4  | 7.6   |
| Malta               | 1996      | 4327  | 15-49  | 15.4  | 7.2   | 1.2   | 1.2   |
| Malta               | 1984      | n/a   | 25-64  | 46    | 22    | 32    | 36    |
| Mauritius Islands   | 1982      | 1862  | 18+    | 29    | 21    | 29    | 31    |
| Mexico              | 2000/01   | 2806  | 15-49  | 15.4  | 23.5  | 19.2  | 19.2  |
| Mexico              | 1999      | 2971  | 25-74  | 33    | 6     | 34    | 29    |
| Mexico              | 2000      | 11188 | 20-69  | 41.3  | 19.2  | 26.2  | 29    |
| Moldova             | 1999      | 2449  | 20+    | 30.5  | 13.8  | 32    | 24.6  |
| Moldova             | 2000      | 1793  | 20+    | 35.5  | 6.2   | 20.8  | 21.7  |
| Mozambique          | 1997      | 3091  | 15-49  | 15.4  | 7.8   | 1.7   | 1.7   |
| Namibia             | 1992      | 2355  | 15-49  | 15.4  | 13.8  | 7.1   | 7.1   |
| Nauru               | 1984      | n/a   | 25-69  | 50.2  | 17.5  | 25.5  | 25.5  |
| Nepal               | 2001      | 4078  | 15-49  | 15.4  | 3.2   | 0.8   | 0.8   |
| Netherlands         | 1998-2002 | 2891  | 20-69  | 43.5  | 10.4  | 29.5  | 19.1  |
| New Zealand         | 1997      | 8420  | 15+    | 14.70 | 18.70 | 19.2  | 19.2  |
| Nicaragua           | 1997/98   | 4793  | 15-49  | 15.4  | 25.1  | 28.6  | 11.6  |
| Niger               | 1999      | 3328  | 15-49  | 15.4  | 6     | 1.6   | 1.6   |
| Nigeria             | 1991-4    | 1990  | 20+    | n/a   | 8.5   | 9.1   | 9.1   |
| Niue                | 1987      | 740   | 20+    | 34    | 15    | 28    | 48    |
| Norway (Troms)      | 1984-85   | 8548  | 20-49  | 34    | 10    | 11    | 11    |
| Oman                | 2000      | 5838  | 20+    | 31.8  | 16.2  | 26.6  | 20.5  |
| Pakistan            | 1998      | 1471  | 18+    | 18.3  | 4.9   | 21.4  | 8.6   |
| Pakistan            | 1998      | 936   | 20-65  | 22.8  | 22.8  | 42.5  | 42.5  |
| Panama              | 2000      | 878   | 15-83  | 30.32 | 27.88 | 33.44 | 36.08 |
| Panama              | 1998      | 736   | n/a    | n/a   | n/a   | n/a   | n/a   |
| Paraguay            | 1991-92   | 1008  | 20-74  | 41.6  | 22.9  | 38.1  | 35.7  |
| Peru (Lima)         | 1996      | n/a   | Adults | 41.6  | 7.2   | 40.9  | 15.4  |
| Philippines         | 1998      | 8298  | 20+    | 14.9  | 2.1   | 18.9  | 4.4   |
| Poland <sup>b</sup> | 1996      | 29427 | 15+    | n/a   | 10.3  | 12.4  | 12.4  |

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|                           |           |       |       |      |      |      |      |
|---------------------------|-----------|-------|-------|------|------|------|------|
| Qatar                     | 2003      | 1228  | 25-59 | 34.3 | 34.6 | 33   | 48.3 |
| Romanda                   | 2000      | 4090  | 15-49 | 15.4 | 11.8 | 1.4  | 1.4  |
| Romania <sup>a</sup>      | 1997      | 7547  | 25+   | n/a  | 10.8 | 22.4 | 22.4 |
| Romania <sup>a</sup>      | 2000      | 9056  | 18-59 | 38.7 | 19.3 | 27.4 | 21.8 |
| Russia                    | 1995      | 698   | 20+   | n/a  | 20.9 | 63   | 63   |
| Saudi Arabia              | 1998-2000 | 17233 | 30+   | 42.4 | 26.4 | 31.8 | 44   |
| Scotland                  | 1998      | 7456  | 18+   | 43   | 19   | 32   | 32   |
| Senegal                   | 1992/3    | 2896  | 15-49 | 15.4 | 12   | 3.7  | 3.7  |
| Seychelles                | 1994      | 1959  | 15-64 | 29.8 | 6.6  | 31.6 | 28.2 |
| Singapore                 | 2004      | n/a   | 18-69 | n/a  | 36.9 | 15.0 | 33.1 |
| Sierra Leone <sup>a</sup> | 1997/8    | 4733  | 20+   | n/a  | 15.2 | 19.6 | 19.6 |
| South Africa              | 1998      | 13685 | 18+   | 21.1 | 19.1 | 25.8 | 27.9 |
| Spain                     | 1998-2000 | 9880  | 25-60 | 48   | 13.4 | 32.2 | 16.8 |
| St. Lucia                 | 1991-84   | 1084  | 25-74 | 44   | 8.4  | 26.8 | 28.7 |
| Sweden                    | 1996-7    | 11422 | 18-84 | 41.2 | 10   | 29.8 | 11.9 |
| Switzerland <sup>b</sup>  | 2000-1    | 2482  | 25-74 | 48.9 | 14.1 | 27.6 | 16.4 |
| Tanzania <sup>a</sup>     | 1999      | 9313  | 25-64 | 4.5  | 4.5  | 10   | 10   |
| Thailand <sup>a</sup>     | 1985      | 3486  | 35-64 | 23.3 | 2.2  | 18.4 | 3    |
| Togo                      | 1996      | 3029  | 15-49 | 15.4 | 19   | 9    | 9    |
| Tonga                     | n/a       | n/a   | n/a   | n/a  | 48.8 | 26.3 | 26.3 |
| Trinidad & Tobago         | 1999      | 803   | 20+   | 29.6 | 16.7 | 33.6 | 21.1 |
| Tunisia                   | 1997      | 2780  | 20-60 | 23.3 | 8.7  | 28.2 | 22.7 |
| Turkey <sup>a</sup>       | 2000-2    | 6916  | 20+   | 46.6 | 18.5 | 28.6 | 28.4 |
| Turkmenistan              | 2000      | 2117  | 15-49 | 15.4 | 16   | 7.8  | 7.8  |
| UAE <sup>b</sup>          | 2000      | 6665  | 20-79 | 23   | 25.8 | 39.9 | 39.9 |
| Uganda                    | 2000/01   | 2322  | 15-49 | 15.4 | 6.5  | 1.7  | 1.7  |
| Uruguay <sup>a</sup>      | 1998      | 900   | 18+   | 40   | 17   | 30   | 18   |
| USA                       | 1999-2000 | 2901  | 20-74 | 29.3 | 27.7 | 28   | 24   |
| USA                       | 1997      | 1904  | 30+   | n/a  | 34   | 33   | 33   |
| Uzbekistan <sup>a</sup>   | 1998      | 1014  | 20+   | 33.6 | 12.2 | 22.2 | 19.6 |
| Venezuela                 | 1991-87   | 7942  | 20-50 | 22.1 | 4.7  | 23   | 8.9  |
| Vietnam <sup>a</sup>      | 2000      | 7400  | 15-49 | 15.4 | 44   | 17   | 30   |
| Yemen                     | 1997      | 5479  | 15-49 | 15.4 | 11.1 | 4    | 4    |
| Zambia                    | 2001/2    | 3829  | 15-49 | 15.4 | 7.9  | 2.4  | 2.4  |
| Zimbabwe                  | 1998      | 2298  | 15-49 | 15.4 | 18   | 8    | 8    |

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<sup>a</sup> urban

<sup>b</sup> self reported data

<sup>c</sup> IOTF estimate

<sup>d</sup> Date of publication

Updated March 16 2005

Source: International Obesity Task Force (IOTF)

(<http://www.iotf.org/media/globalprev.htm>)

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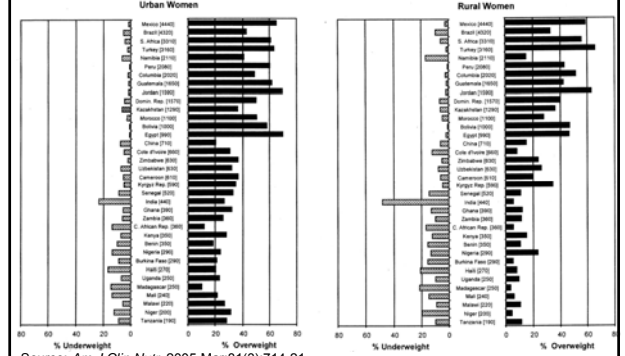
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Prevalence of overweight and underweight (BMI <18.5) in women aged 20–49 y ranked by per GNI.



Source: *Am J Clin Nutr.* 2005 Mar;81(3):714-21.

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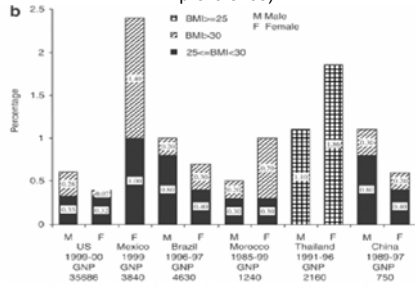
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Obesity patterns and trends across the world, adults aged 20 y and older. Obesity trends (the annual percentage point increase in prevalence).



Source: *Int J Obes Relat Metab Disord.* 2004 Nov;28 Suppl 3:S2-9.

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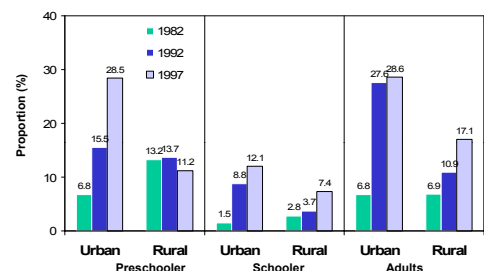
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Overweight Levels Are Increasing in Urban Areas Among All Age Groups and in Rural Areas Among Adults & Adolescents in China



Standards for preschoolers & children: International Obesity Task Force (IOTF)

Source: *Public Health Nutr.* 2002 Feb;5(1A):169-74.

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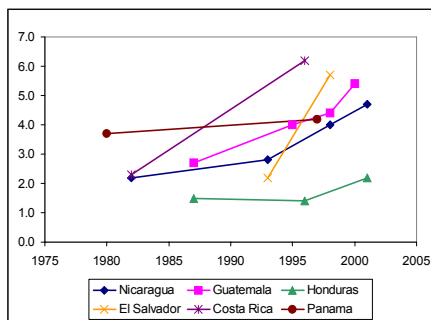
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Trends of overweight (W/H >2 SD) in infants (preschool age) in Central America (national data)



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## The Republic of the Seychelles



- 80'000 inhabitants
- 90% black African decent
- 90% live on the main island (Mahé)
- 75% of workers are employed in services
- GDP per capita rose from US\$ 600 in 1976 to US\$ 8492 in 2004

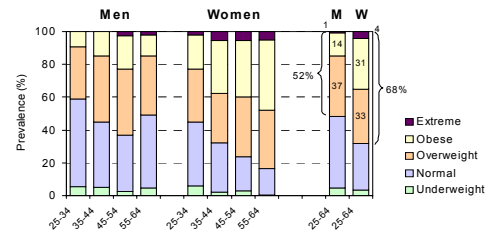
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## Prevalence of overweight/obesity in population aged 25-64



Prevalence of overweight/obesity: 52%M 68%W  
(~16,000 overweight, ~12,000 obese)

Source: Bovet, et. al. 2004

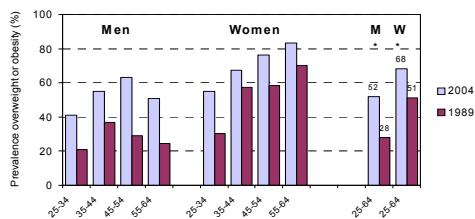
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## Trends in prevalence of overweight/obesity, 1989-2004



Source: Bovet, et. al. 2004

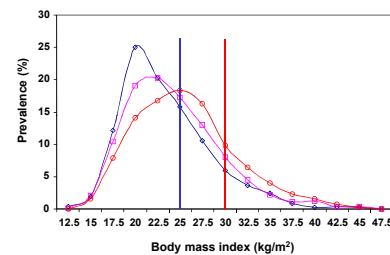
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## Distribution of BMI in the Seychellois population aged between 25 and 64 years, 1989-2004



Source: Bovet, et. al. 2004

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| Studie  | Datenerhebung (Jahr) | Alter (Jahre) | n (m/f)       | Übergewicht (BMI 25-29.9 kg/m <sup>2</sup> ) |       | Adipositas (BMI ≥ 30 kg/m <sup>2</sup> ) |       |
|---|----------------------|---------------|---------------|--|-------|--|-------|
|   |                      |               |               | m (%)  | f (%) | m (%)                                    | f (%) |
| Nutri-Trend-Studie (3)                          | 2000                 | 18-71         | 478/625       | 32   | 19    | 6  | 4     |
| Genfit Survey (58)                              | 2000                 | 35-71         | 1'707/1'703   | 45   | 24    | 15                                       | 9     |
| Luftbus-Studie I (10)                           | 1995-1999            | 20-99         | 14'172/16'425 | 26.5   | 22.6  | 6.6                                      | 7.5   |
| Schweizerische Gesundheitsbefragung 1992/93 (5) | 1992/93              | 18-84         | 7'930/7'353   | 35.1   | 17.1  | 6.1                                      | 4.7   |
| MONICAVD (27)                                   | 1992/93              | 25-74         | 1'592/1'703   |  |       | 14.6                                     | 10.1  |
| HEUREKA-Studie (12)                             | 1991                 | 20-90         | 5'115/6'004   | 22.4   | 12.7  | 2.0                                      | 2.6   |
| Luftbus-Studie II (11)                          | 2003                 | 11-92         | 1'004/1'067   | 28.6   | 23.3  | 13.6                                     | 14.7  |
| EURALIM Project (7)                             | 1995-1996            | 29-83         | 1'083/1'043   | 42   | 21    | 11                                       | 9     |

3: Eichholzer M, Camenzind E. Übergewicht, Adipositas und Untergewicht in der Schweiz. Resultate der Nutri-Trend Studie 2000. Praxis 2003; 92: 847-58.

58: Bernstein MS, Costanza MC, Morabia A. Physical activity of urban adults: a general population survey in Geneva. Soc Präventivmedizin 2001; 46: 49-59.

10: Egger S, et al. Übergewicht und Adipositas im Kanton Zürich: Eine Luftbus-Studie. PRAxis (Schw. Rundsch. Med.) 2001; 96: 831-6.

15: Eichholzer M, Lütthy J, Gutzwiler F. Epidemiologie des Übergewichts in der Schweiz. Resultate der GSB 1992/93. Schweiz Med Wochenschr 1999; 129: 353-61.

27: Wellischbach V, et al. Trends in Cardiovascular Risk Factors (1984-1993) in a Swiss Region: Results from 3 Population Surveys. Prev. Med. 1997; 26: 623-33.

12: Suter PM, et al. HEUREKA-Studie: Prävalenz des Übergewichtes und der Adipositas in der (Schw. Rundsch. Med.) PRAxis 1993; 82: 1399-62.

11: Egloff C. Luftbus 2003 - Gesundheitsdaten aus dem Luftbus der Lungenliga Zürich. (Laufende Dissertationarbeit)

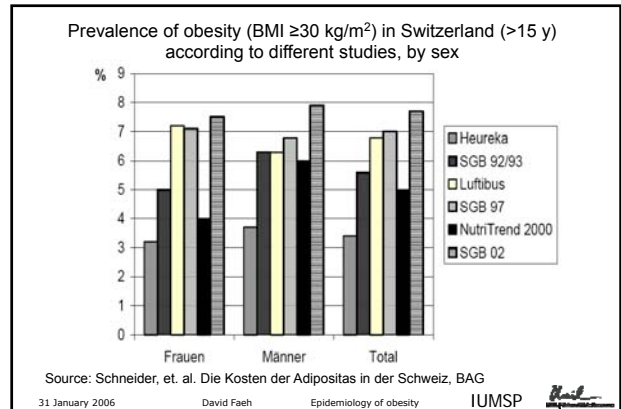
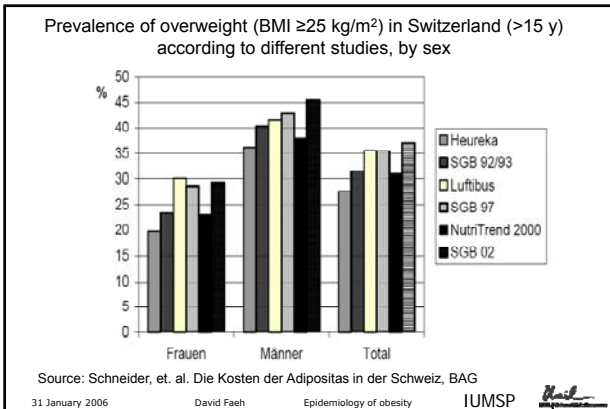
7: Beer-Borst et al. Obesity and other health determinants across Europe: The EURALIM Project. J Epidemiol Community Health 2006; 64: 48-52.

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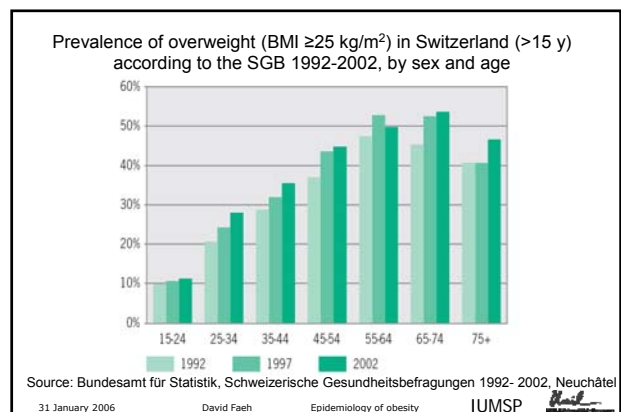
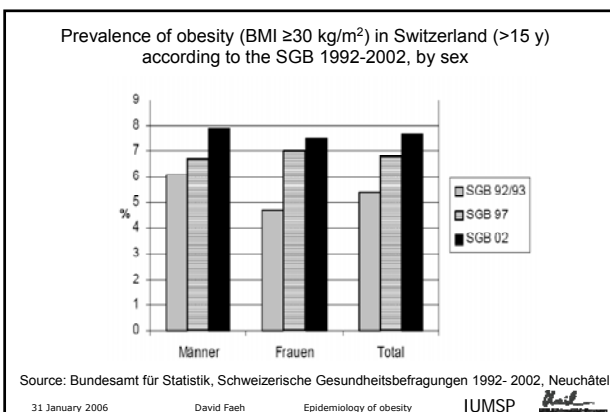
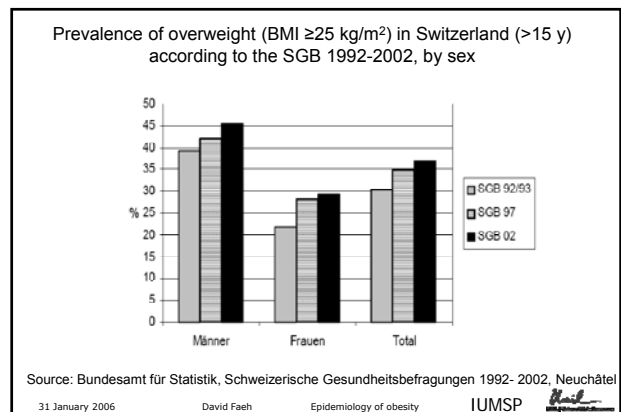


Prevalence of overweight (BMI  $\geq 25$  kg/m<sup>2</sup>) and obesity (BMI  $\geq 30$  kg/m<sup>2</sup>) in Switzerland (>15 y) according to the SGB 2002, by sex

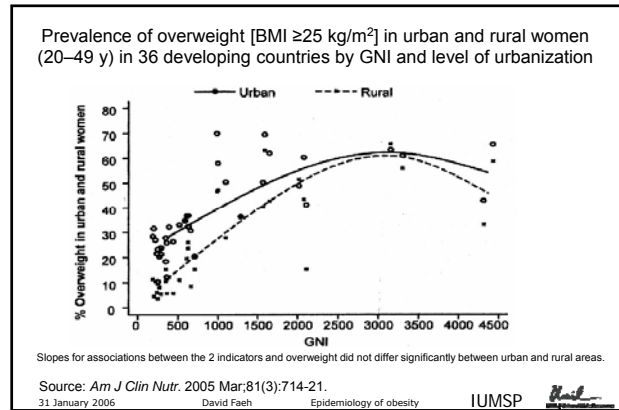
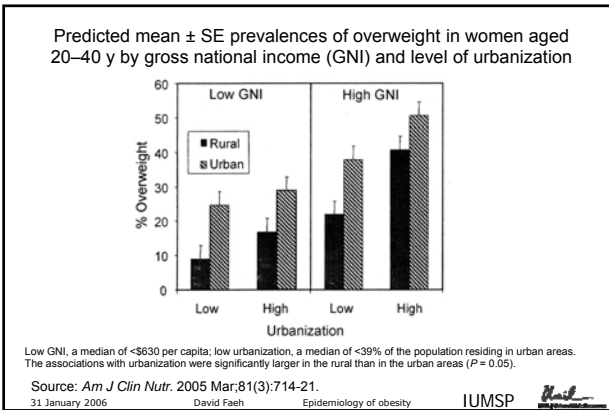
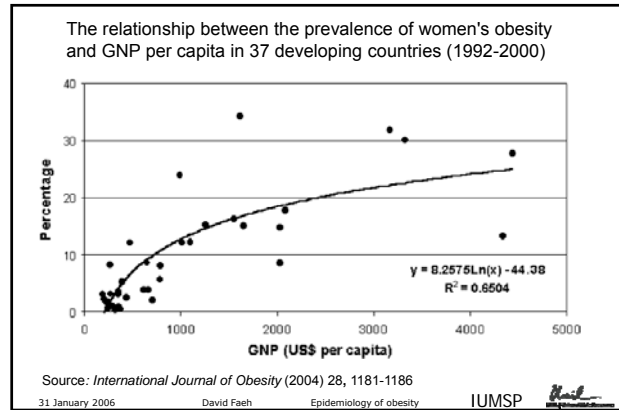
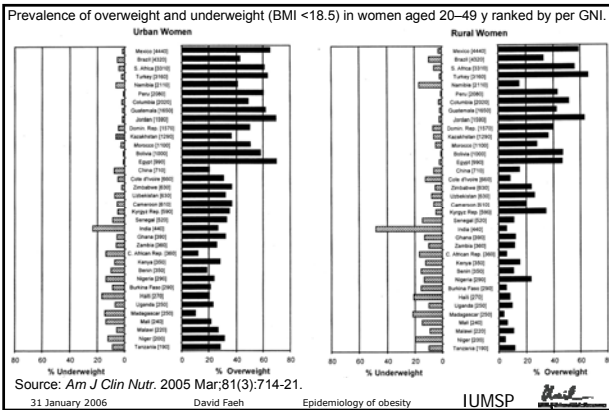
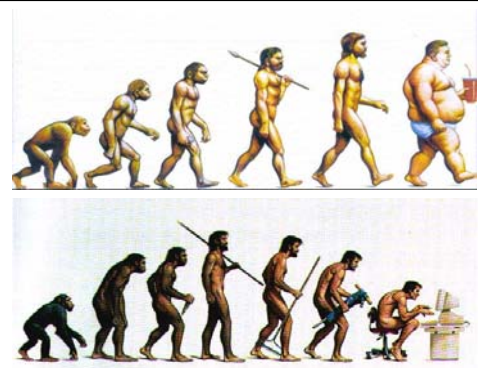
|           | Overweight (BMI $\geq 25$ kg/m <sup>2</sup> ) | Obesity (BMI $\geq 30$ kg/m <sup>2</sup> ) |
|-----------|---|--|
| Men (%)   | 45.4  | 7.9  |
| Women (%) | 29.3  | 7.5  |
| Total (%) | 37.1  | 7.7  |

Source: Bundesamt für Statistik, Schweizerische Gesundheitsbefragungen 2002, Neuchâtel

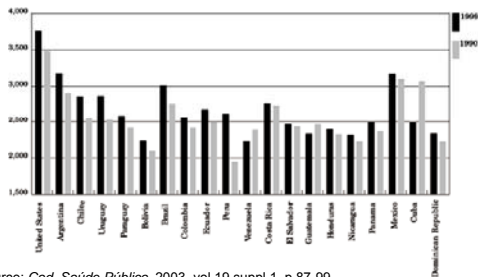
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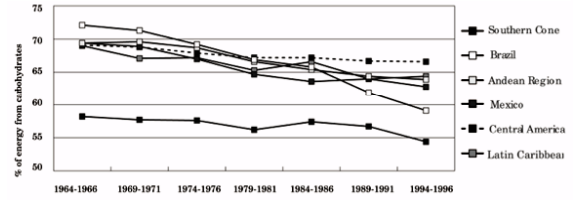


Available energy (daily kcal per capita) in Latin America in 1990 and 1999



Source: *Cad. Saúde Pública*, 2003, vol.19 suppl.1, p.87-99.

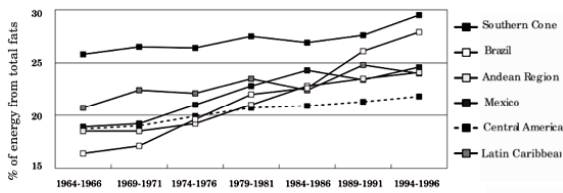
Trends in carbohydrate availability (% energy) in Latin America, 1964-1996



Southern cone: refers to Argentina, Chile, Uruguay, Paraguay and Southeastern Brazil

Source: *Cad. Saúde Pública*, 2003, vol.19 suppl.1, p.87-99.

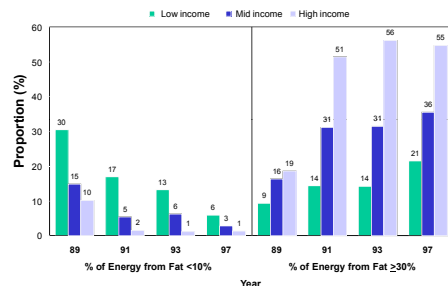
Trends in fat intake (% energy) in Latin America, 1964-1996



Southern cone: refers to Argentina, Chile, Uruguay, Paraguay and Southeastern Brazil

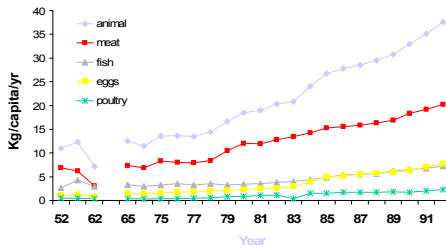
Source: *Cad. Saúde Pública*, 2003, vol.19 suppl.1, p.87-99.

The Chinese Diet Is Shifting From a Low to High Fat Diet Among Chinese Adults Aged 20-45, CHNS 1989-97



Source: *Public Health Nutr.* 2002 Feb;5(1A):169-74.

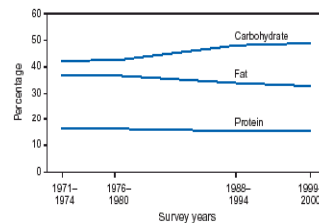
Total Animal Food Intake Is Increasing (Kg/capita/yr)



Source: State Statistical Bureau, China Statistical Yearbook, 1952-2000

Source: *Public Health Nutr.* 2002 Feb;5(1A):169-74.

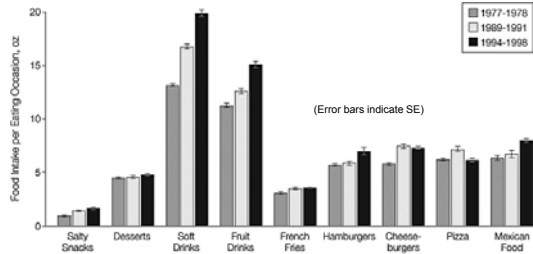
FIGURE 1. Percentage of kilocalories from macronutrient intake among men aged 20-74 years\*, by survey years — National Health and Nutrition Examination Surveys (NHANES), United States, 1971-2000



\*Age adjusted by direct standardization to the 2000 U.S. census population by using age groups 20-30, 40-50, and 60-74 years.

Source: Centers of Disease Control and Prevention (CDC)

Portion sizes for selected food items in U.S. Americans aged 2 years and older, 1977-1996



Source: JAMA. 2003;289:450-453.

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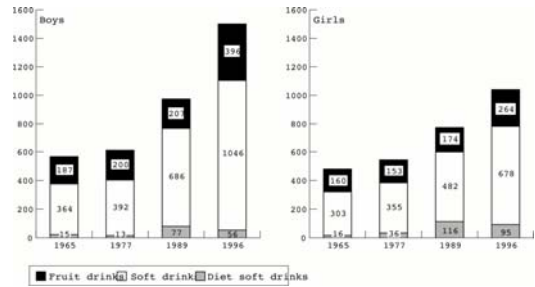
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Trends in beverage consumption among US adolescents in the USDA surveys, 1965-96



Source: Arch Dis Child 2000;83:18-24

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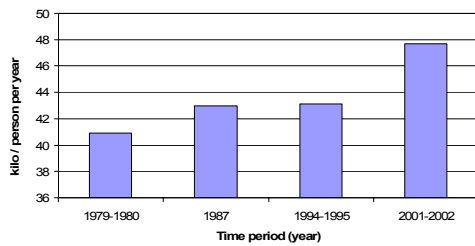
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Sugar consumption in Switzerland



Sources: 1997-1995; 2., 3. & 4. CH Ernährungsbericht, 2001-2002: Schweizerischer Bauernverband

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Annual per capita consumption of sugar sweetened drinks in Switzerland

89.3 kg

Source: Schweizerischer Bauernverband (2001-2002)

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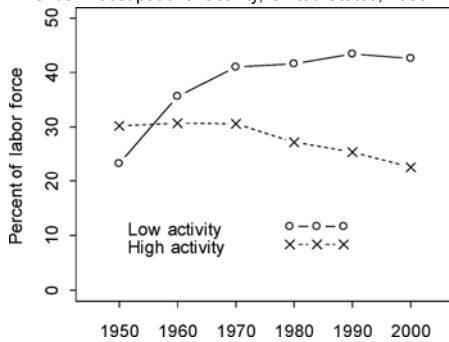
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Trends in occupational activity, United States, 1950-2000.



Source: Annu Rev Public Health. 2005;26:421-43

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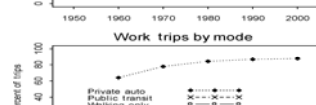
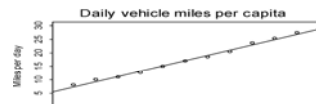
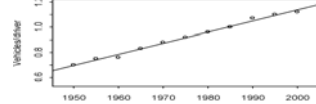
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Vehicles per licensed driver



Trends in transportation activity and automobile dependence in the U.S., 1950-2000

Source: Annu Rev Public Health. 2005;26:421-43

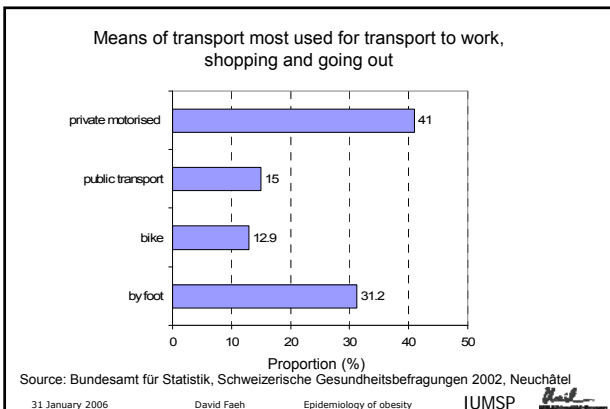
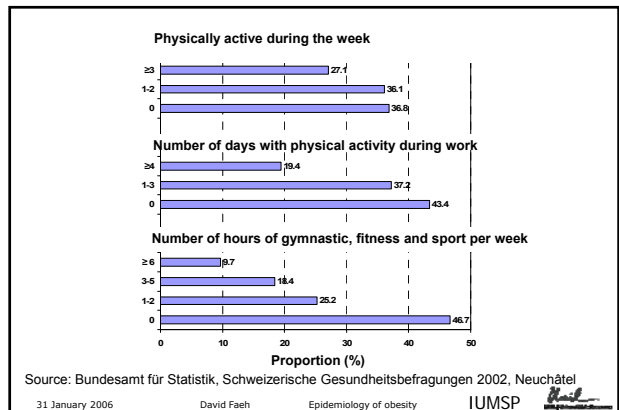
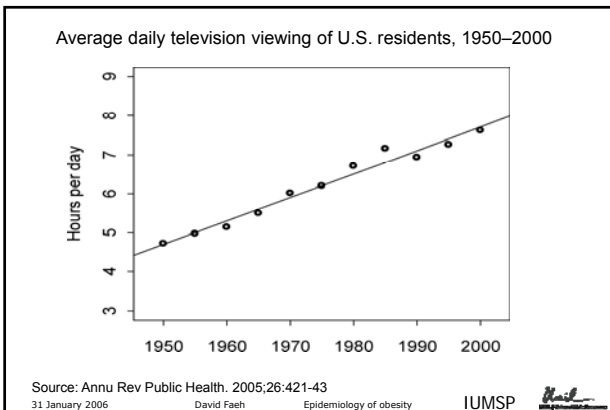
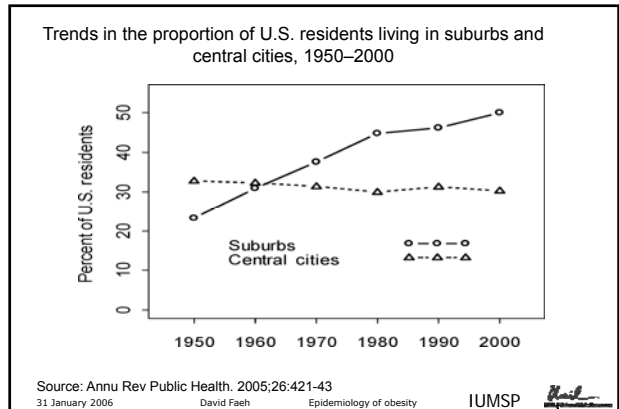
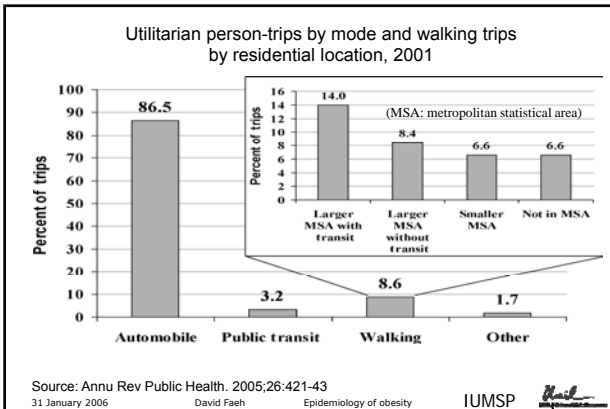
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