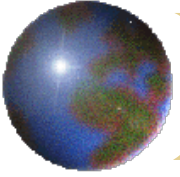


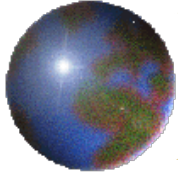
Fiziksel Aktivite ve Saęlık

Prof. Dr. Bülent Ülkar
Spor Hekimlięi Anabilim Dalı



Fiziksel İnaktivite Nedir?

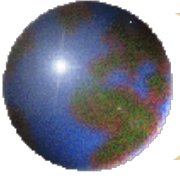
Haftanın en az **5 günü 30 dakika** ve üzerinde orta şiddetli veya haftanın en az **3 günü 20 dakika** ve üzerinde yüksek şiddetli fiziksel aktivite **“*yapmayan bireyler*”** fiziksel olarak **inaktifdir!**



Fiziksel aktivite saėlık iin ne yapabilir?

- ✦ Hastalıkların önlenmesine yardımcı olur.
- ✦ Hastalıkların tedavisinde kullanılabilen önemli bir araçtır.
- ✦ Sağlıklı kalmaya yardımcı olur;
- ✦ *Yaşam kalitesini artırır*
- ✦ *Yaşlanmayı geciktirir.*

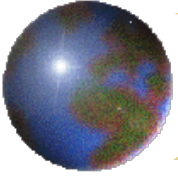
Fiziksel aktivite pek çok tıbbi sorun için derde deva olmayabilir, ancak sağlıklı kalmak için yapılabileceklerin en iyisidir!



Hipokinetik hastalıklar

- ⊕ *Hipo* “altında” veya “çok az” demektir.
- ⊕ *kinetik* “hareket” veya “aktivite” anlamına gelir.
- ⊕ Fiziksel aktivite eksikliği ile ilişkili hastalıklar
- ⊕ Semptomlar gençlik döneminde başlar.

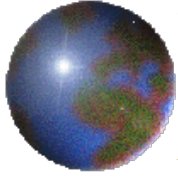




Hipokinetik hastalıklar

- ⊕ Kardiyovasküler hastalıklar
 - ⊗ Enfarktüs
 - ⊗ İnme
 - ⊗ Hipertansiyon
 - ⊗ Periferik vasküler hastalıklar
 - ⊗ Varis
- ⊕ Sırt, boyun, bacak ağrıları
- ⊕ Obezite
- ⊕ Osteoporoz
- ⊕ Ülserler
- ⊕ Kanser
- ⊕ Diğerleri





Sedanter Ölümler Sendromu

Prof. Frank W Booth (Missouri Un.) (2001)

✦ Sedanter yaşamla ilişkili semptomlar görülür.

✦ Bunların içinde;

✦ Zayıf iskelet kasları

✦ Düşük kemik dansitesi

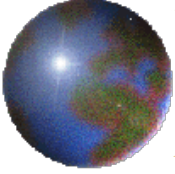
✦ Kötü metabolik durum

- Yüksek kan şekeri ve yağ düzeyleri

- Obezite

- Dinlenimde yüksek kan basıncı değerleri

✦ Kötü kardiyovasküler fitness

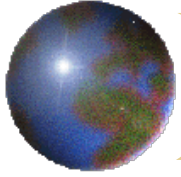


New York- Archieves of Internal Medicine dergisinin son sayısında yayınlanan haberine göre, Avustralyalı bilim insanlarının **45 yaş üstü 222 bin kişi üzerinde yaptığı 3 senelik incelemede;** kişilerin ölüm sebebinin, gün içerisinde oturduğu sürenin fazlalığı ile doğru orantılı olduğu tespit edildi. Araştırmanın sonucunda **gün içerisinde 4 saatten daha az oturan kişilere göre, günün en az 8 saatini oturarak geçirenlerin yüzde 15, en az 11 saatini oturarak geçirenlerin ise yüzde 40 daha fazla ölme riski taşıdığı saptandı.**

Küçük değişikliklerin büyük etkisi olabilir

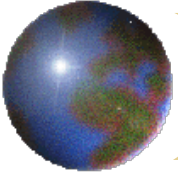
New York North Shore Plainview hastanesi kalp ve damar hastalıkları doktoru olan David Friedman, günün çoğunu oturarak geçirenlerin, özellikle obezite ve kalp hastalıklarına daha kolay yakalandıklarını belirtti. Uzun süre oturarak hareketsiz kalmanın sağlık riskleri üzerindeki etkisini araştıran Dr. Alpa Patel ise, egzersiz yapmanın ve hareket etmenin kan yağı ve kan basıncı üzerinde pozitif bir etkisi olduğunu söyleyerek, **oturma süresini saat başına 5 dakika azaltarak daha sağlıklı bir yaşama başlanabileceğini** belirtti.

Dünya Sağlık Örgütü'nün geçtiğimiz yıl yayımladığı rapora göre, fiziksel hareketsizlik dünya üzerindeki ölüm nedenleri arasında 4. sırada yer alıyor. Yine bu rapora göre, yürüyüş gibi günlük yapılabilen egzersizler göğüs kanseri, depresyon ve diyabet gibi hastalıkların risklerini azaltmakta.



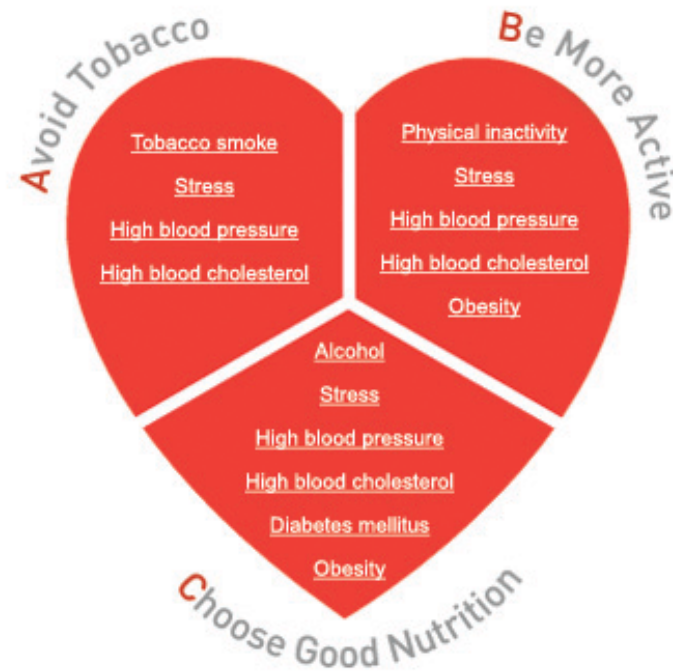
Düzenli fiziksel aktivitenin rolü

- ✚ Kalıtılmış risk faktörlerinin etkilerini yenmekte yardımcı olabilir.
- ✚ Aktif kişilerin erken ölüm riski daha düşüktür.
 - ✚ Aktif-inaktif ikizlerin karşılaştırıldığı çalışmalar
 - ✚ Sağlıklı yaşam için fiziksel aktivitenin olumlu etkileri açıkça ortaya konmuştur.



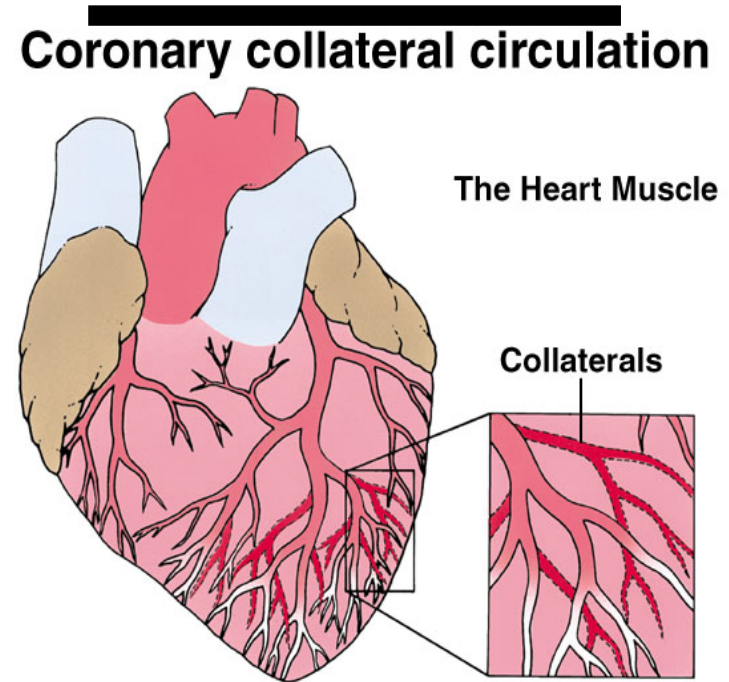
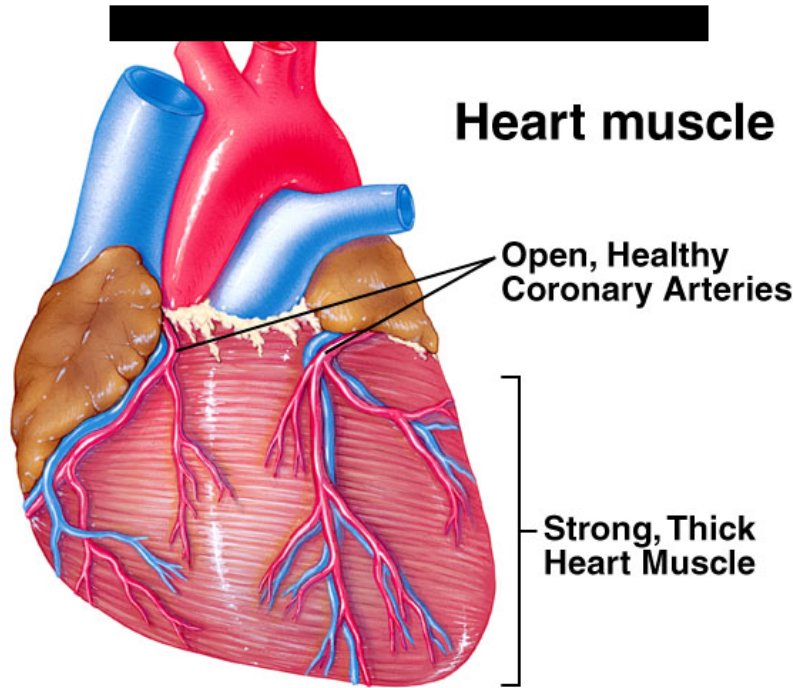
KKH'nın modifiye edilebilen risk faktörleri

- ✚ Sigara içmek
- ✚ Hipertansiyon
- ✚ Hiperkolesterolemi
- ✚ *Fiziksel inaktivite*
- ✚ Aşırı kilolar



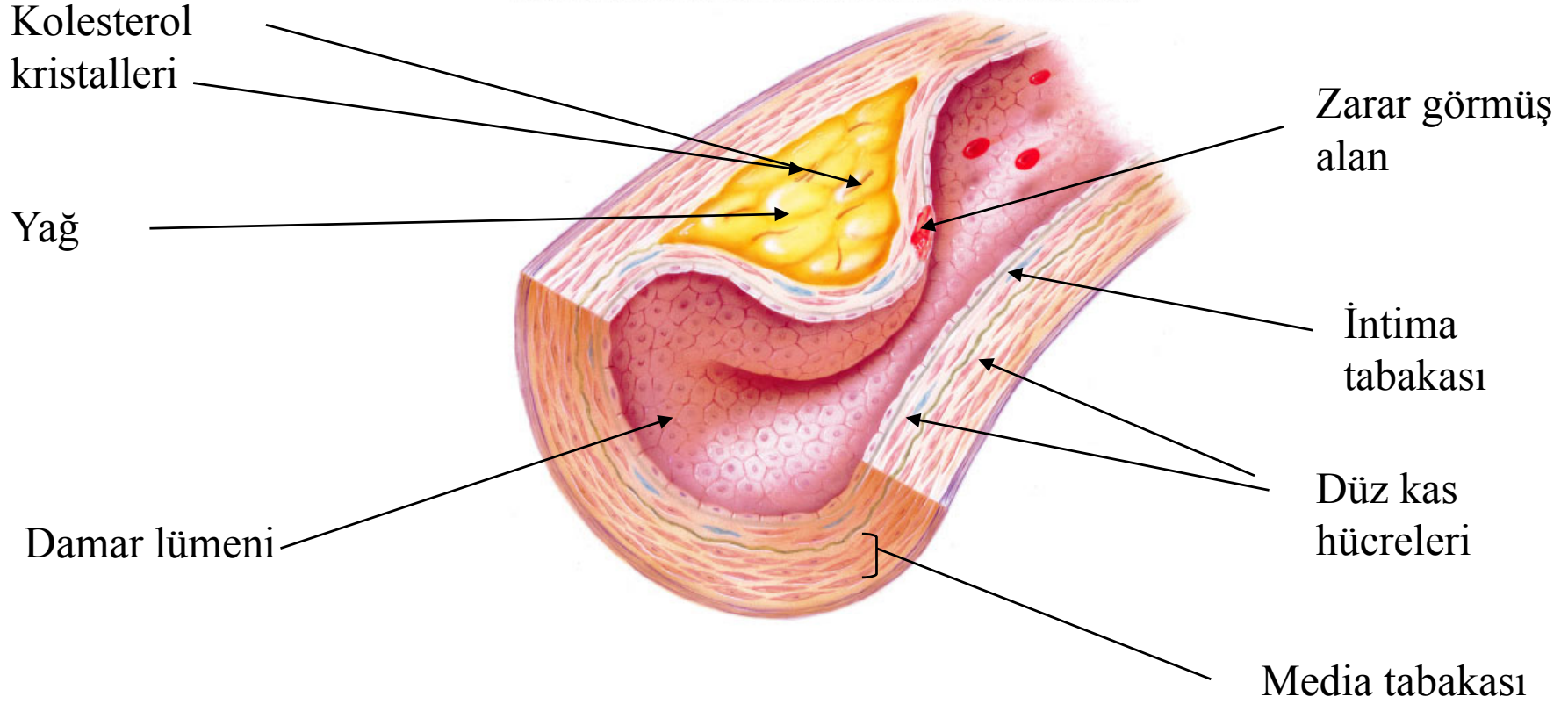
Fiziksel Aktivite ve Kalp

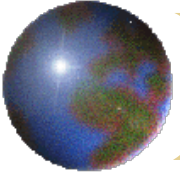
- ✚ Kalp kaslarının güçlü olmasını sağlar
- ✚ Kollateral dolaşımın gelişmesine yardımcı olur



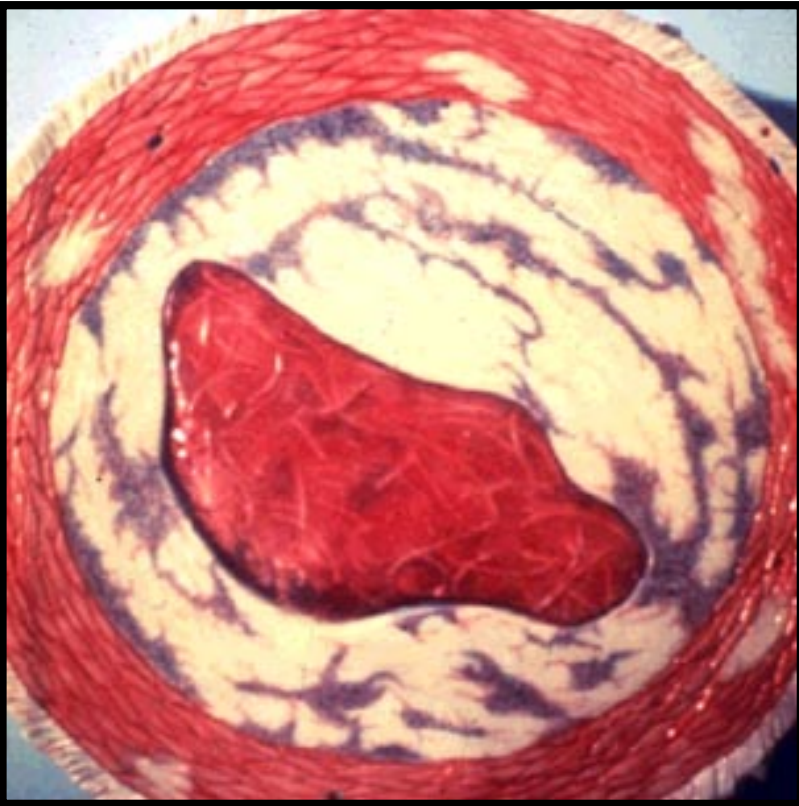
Ateroskleroz

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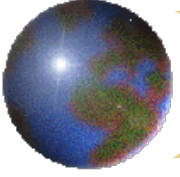




Aktivite ve Ateroskleroz



- ✦ Egzersiz kan yağlarını düşürür.
- ✦ Egzersiz HDL kolesterol düzeyini artırır.
- ✦ Egzersiz fibrin depozitlerini azaltır.



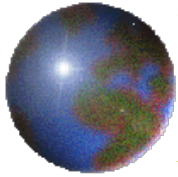
Düzenli fiziksel aktivite ile;

- ✚ Parasempatetik sinir sistemi baskın olur.
- ✚ Kalp stres sonrası normal atım hızına daha çabuk döner.
- ✚ Kalp kaslarının gücü artar.
- ✚ Ani ölüm riski azalır.

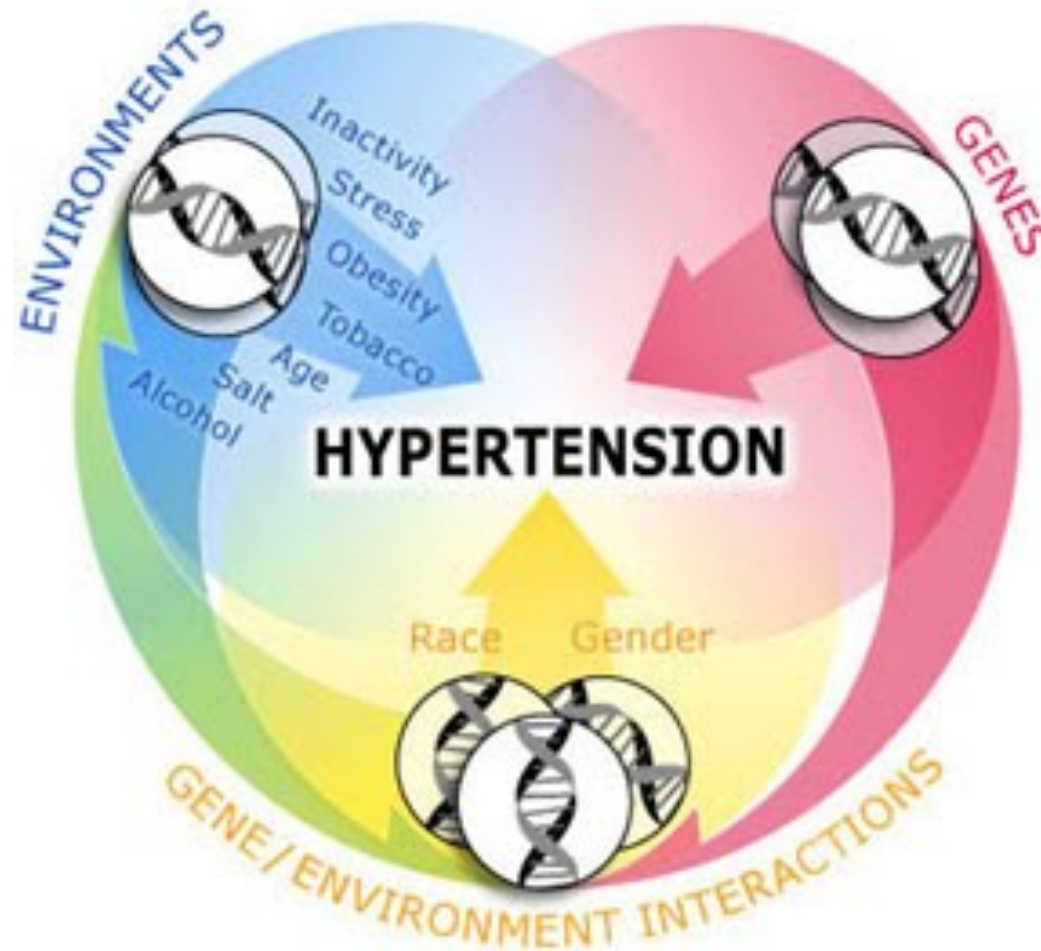
Aktivite koroner kalp hastalığı riskini azaltır!

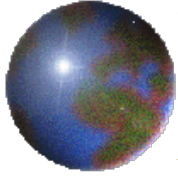
**KKH
Riski**





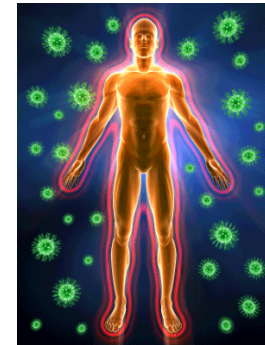
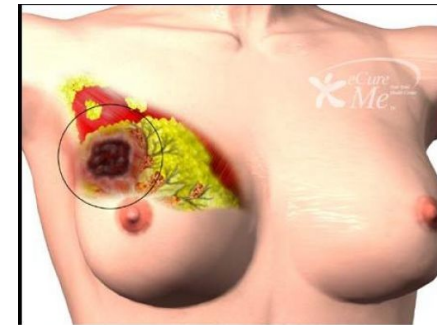
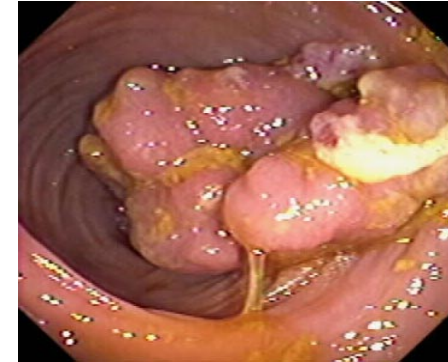
Fiziksel aktivite HT riskini azaltır

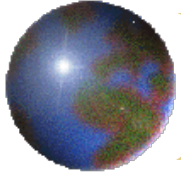




Kanserin önlenmesine yardımcı olur!

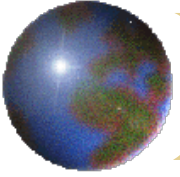
- ✦ Kolo-rektal kanser riskini azaltır. (*kolon geçiş zamanı?*)
- ✦ Meme ve bazı üreme sistemi kanserlerini azaltır. (*düşük yağ düzeyi= daha düşük östrojen düzeyi?*)
- ✦ Bağışıklık sistemini olumlu etkiler.





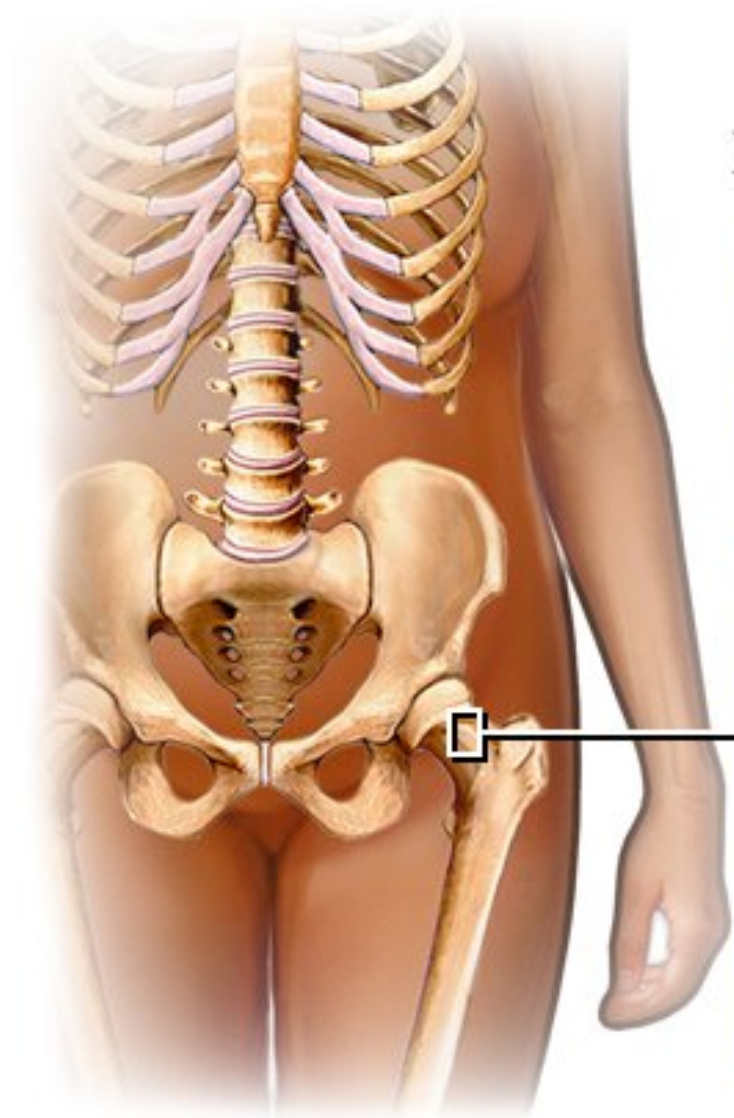
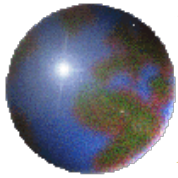
Fiziksel aktivitenin DM üzerine etkisi

- ⊕ Kas ve karaciğer insülin sensitivitesi artar.
- ⊕ Diabetik komplikasyonları geciktirir ve önler.
- ⊕ Kaygı ve stres azalır, iyilik hissi artar.
- ⊕ Diğer kronik hastalıklara yakalanma riski azalır.

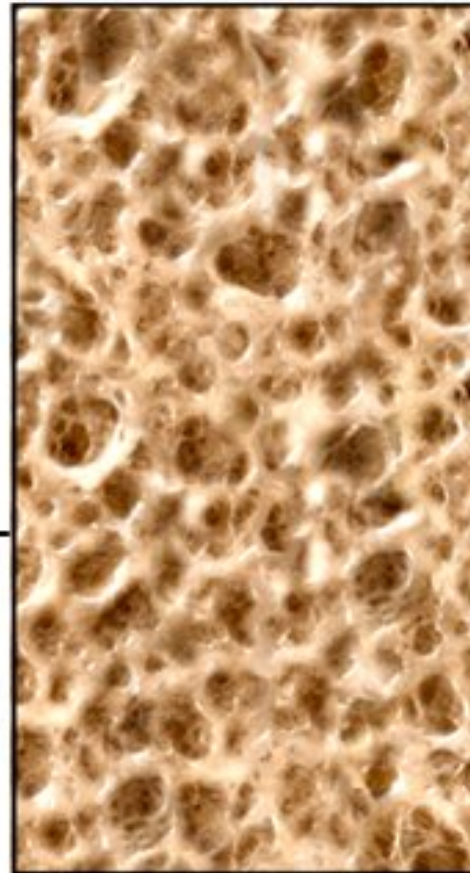


Osteoporozla iliřkili faktörler

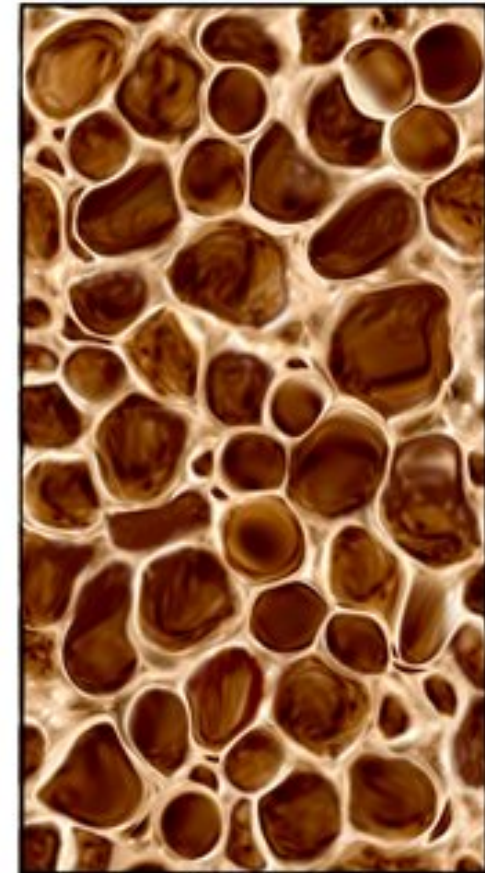
- ❑ Seks hormonlarındaki kayıplar
- ❑ Düşük kalsiyum düzeyi
- ❑ *Fiziksel inaktivite*
- ❑ Yüksek protein alımı
- ❑ Sigara içmek
- ❑ Kafein

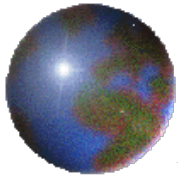


Normal bone matrix

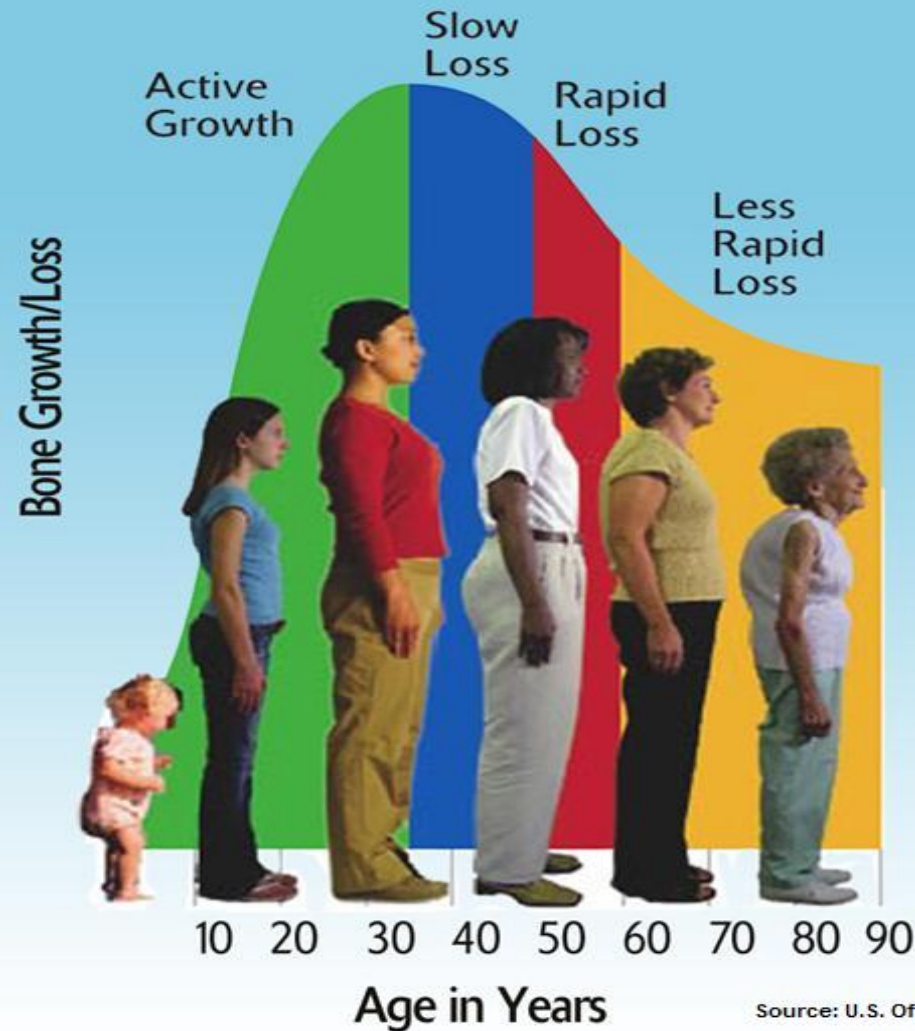


Osteoporosis





After your mid-30s, you begin to slowly lose bone mass. Women lose bone mass faster after menopause, but it happens to men too.

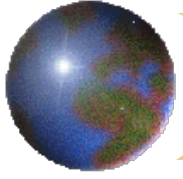


Source: U.S. Office of the Surgeon General

Fiziksel aktivite osteoporoz riskini azaltır!

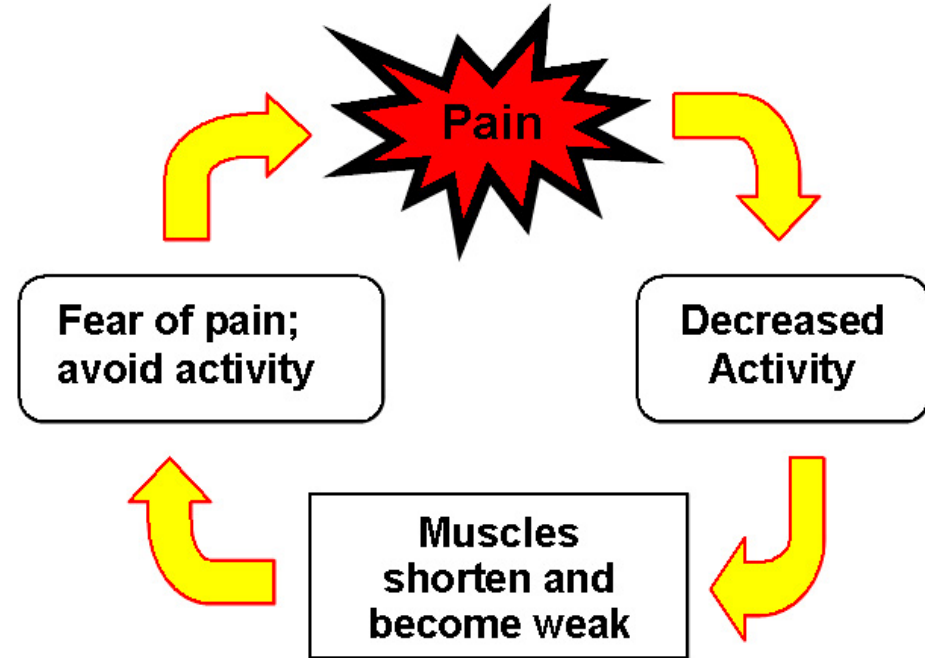
- ✦ Kemik mineral kitesi artar.
- ✦ Kemik kitesindeki azalma yavaşlar.





Bel problemleri

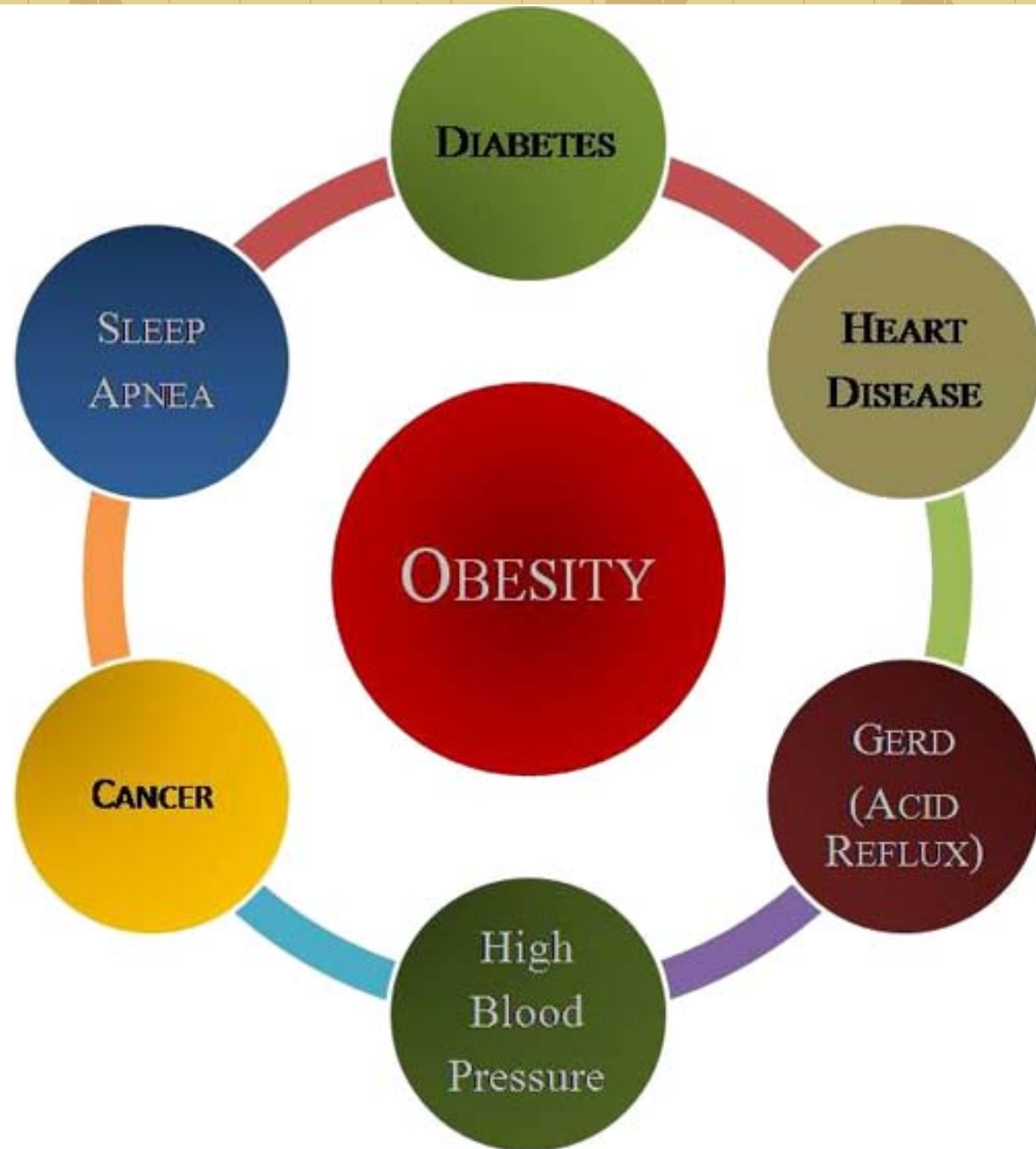
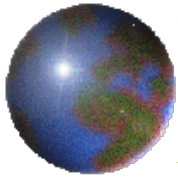
- ✚ İnsanların % 80'i bel ağrısı ile karşılaşmaktadır.
- ✚ En önemli neden inaktivite!

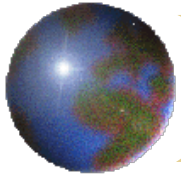


Fiziksel aktivite bel ağrısı riskini azaltır!

- ✦ Eklem ve ligamentlerin esnekliğini artırır.
- ✦ Kas-iskelet sisteminin güç ve dayanıklılığını artırır.

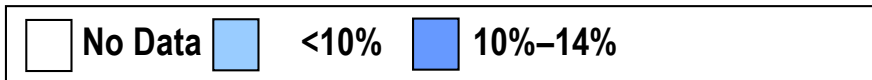
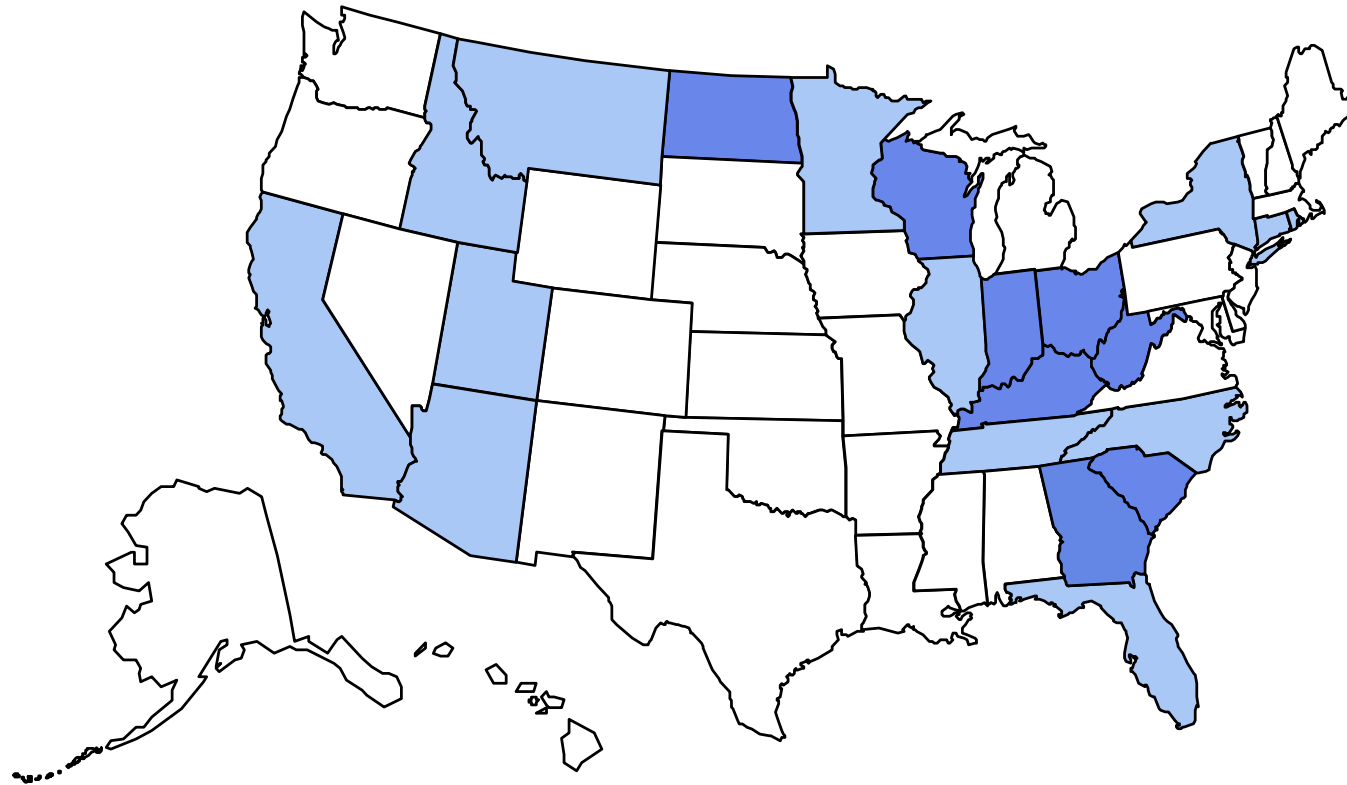


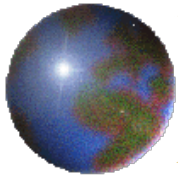




1985

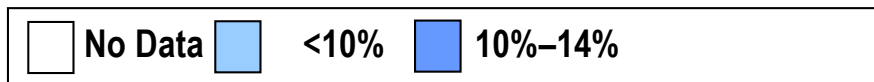
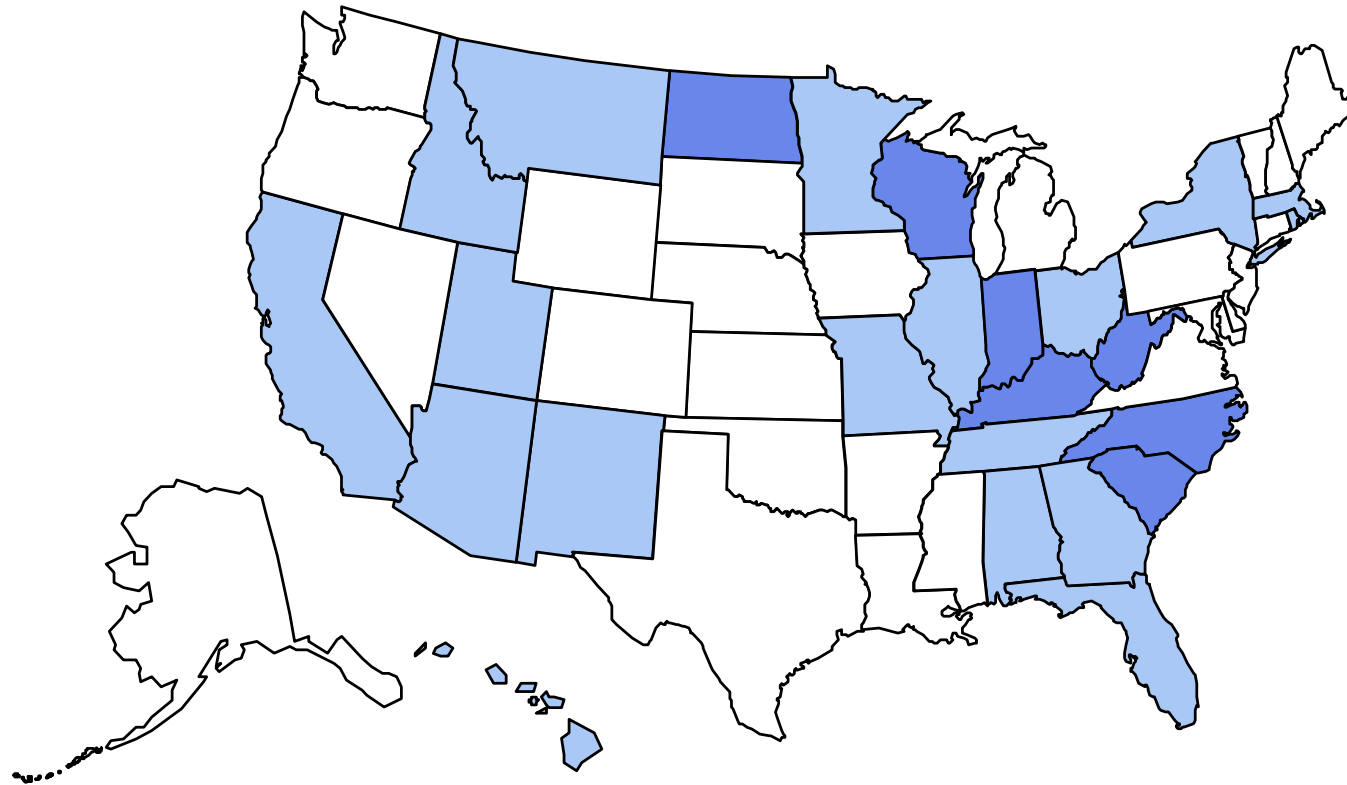
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)

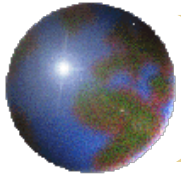




1986

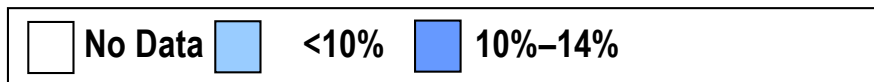
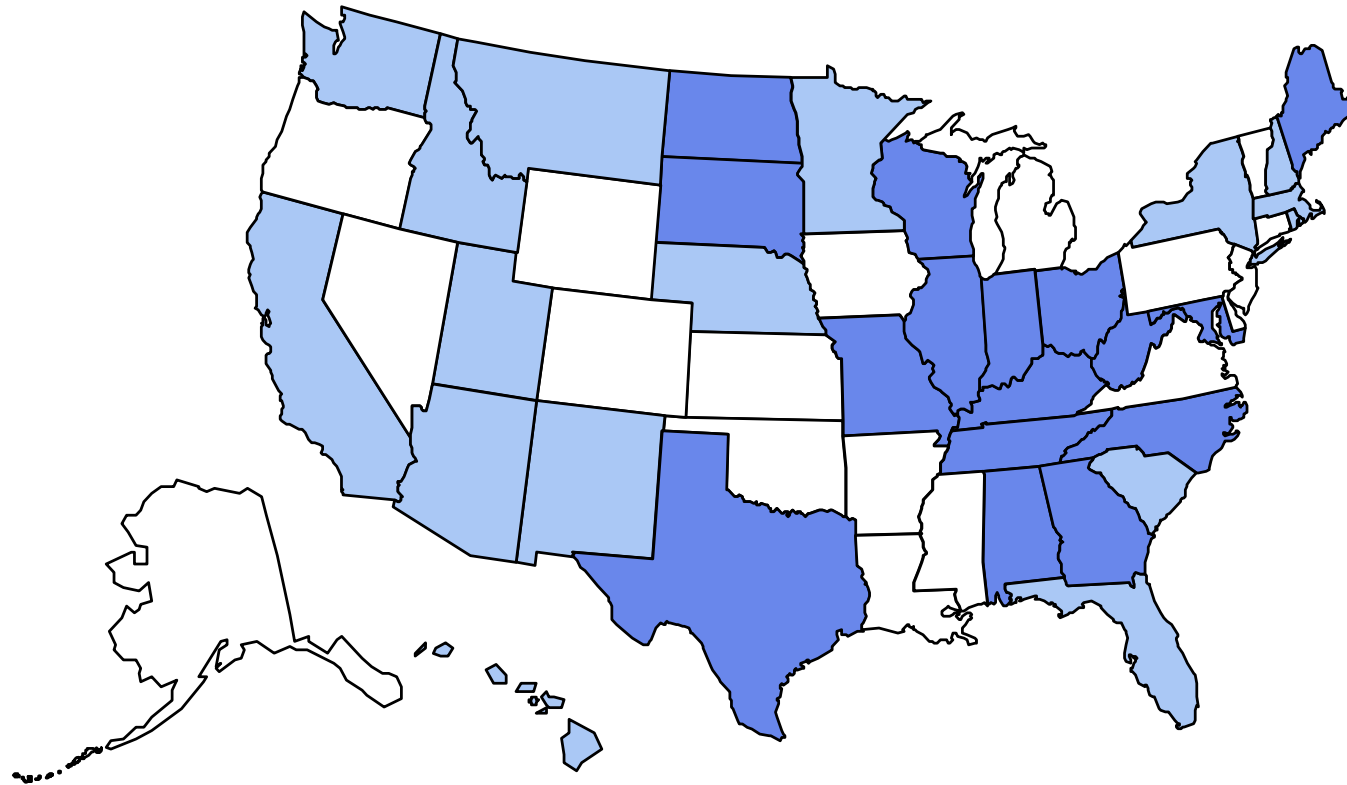
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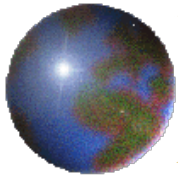




1987

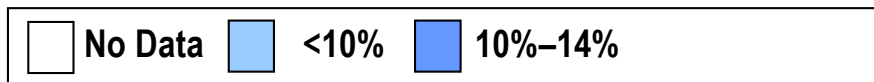
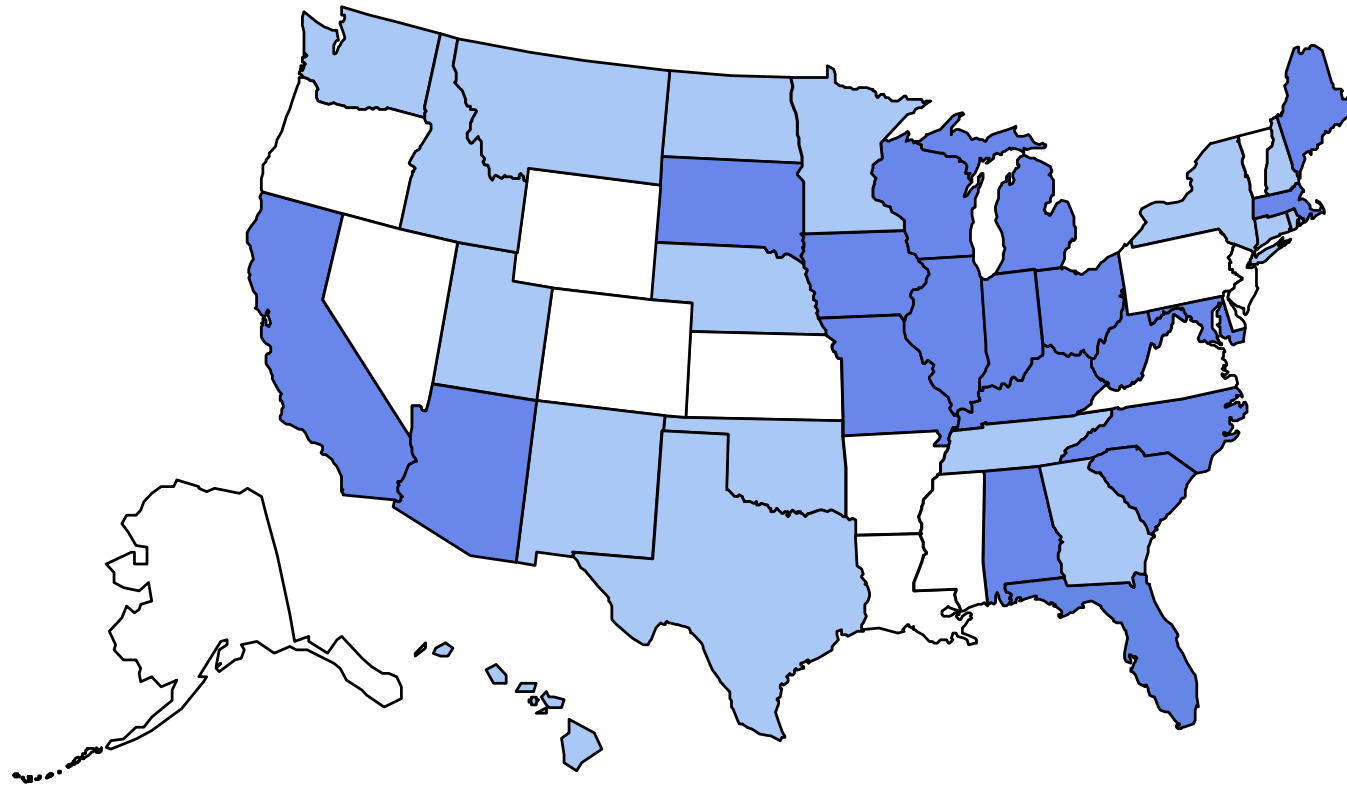
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)

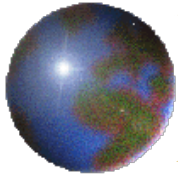




1988

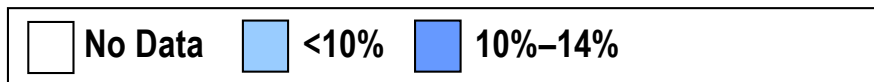
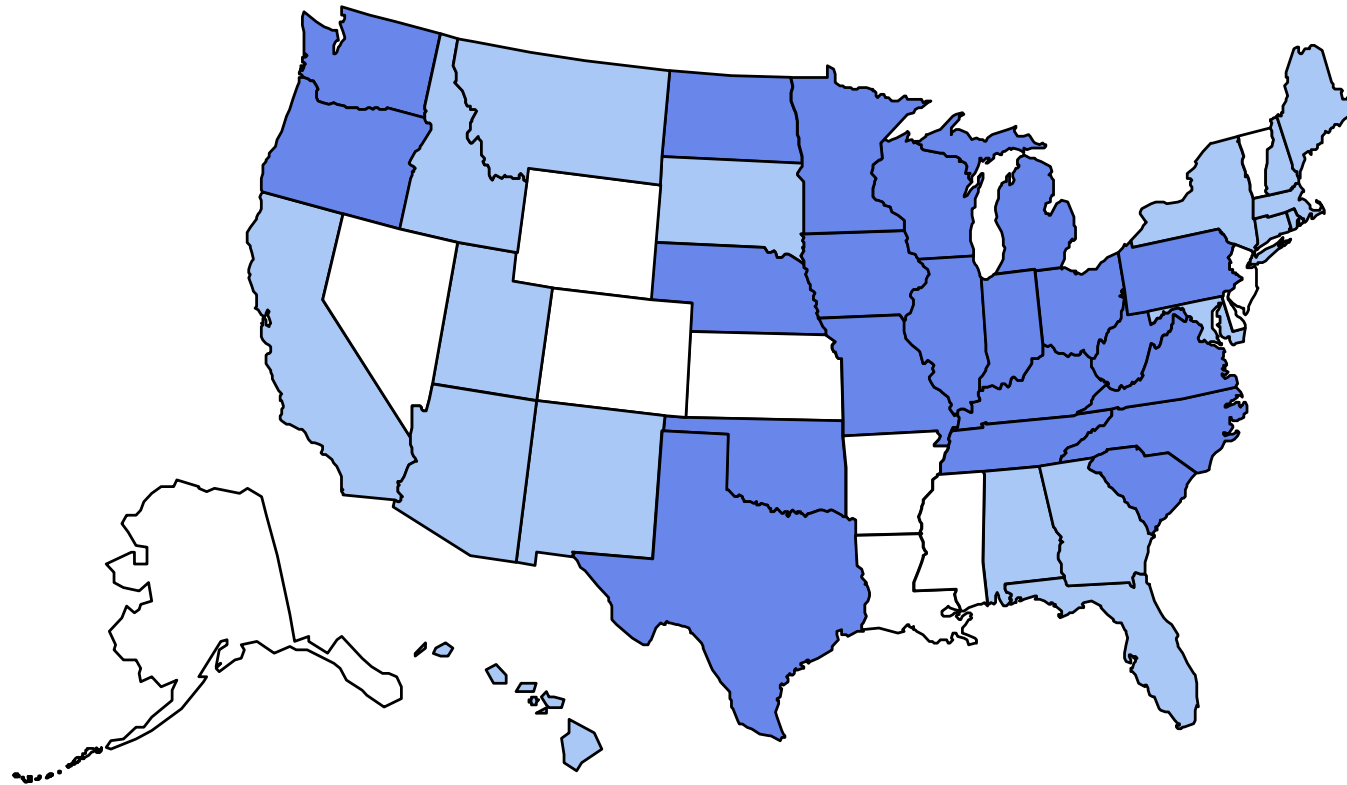
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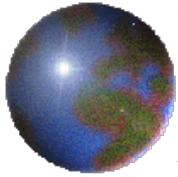




1989

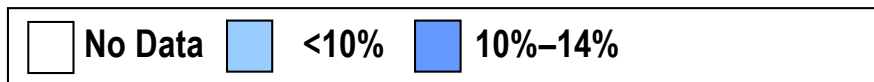
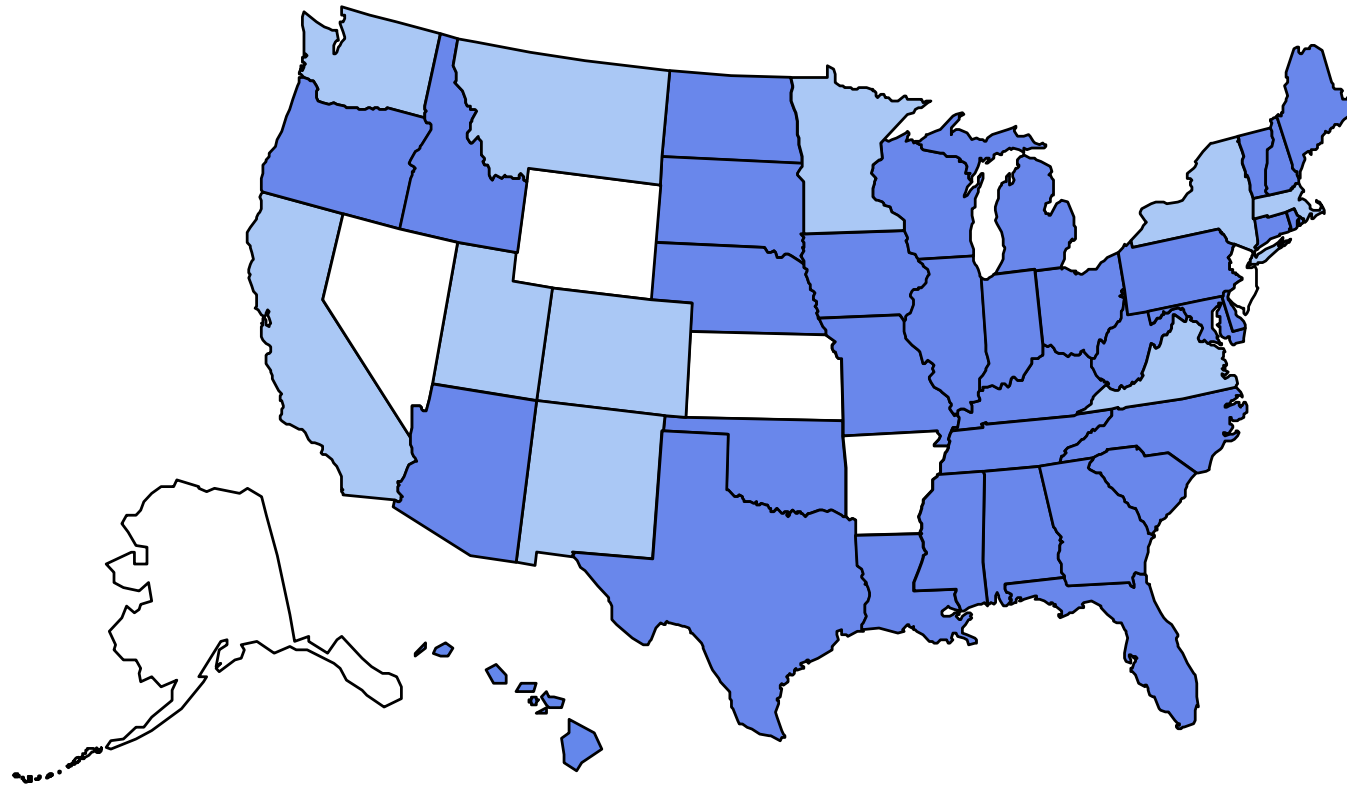
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)

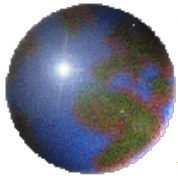




1990

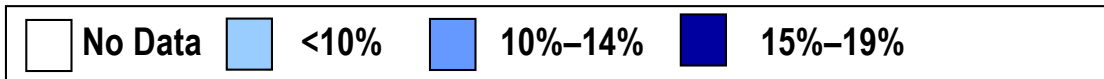
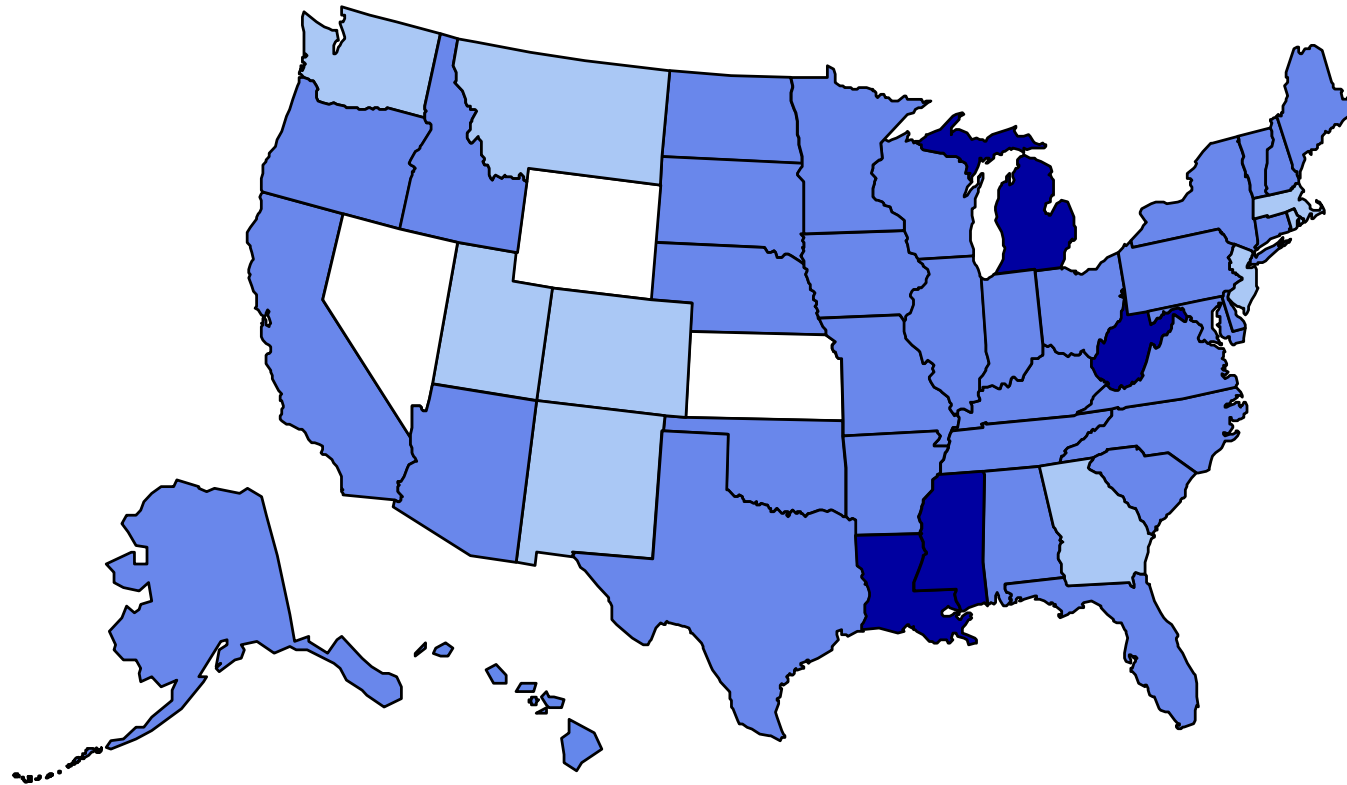
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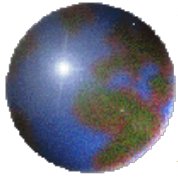




1991

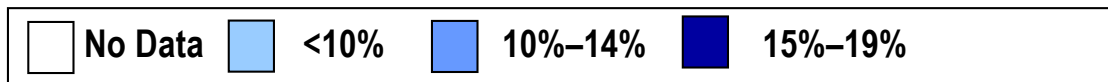
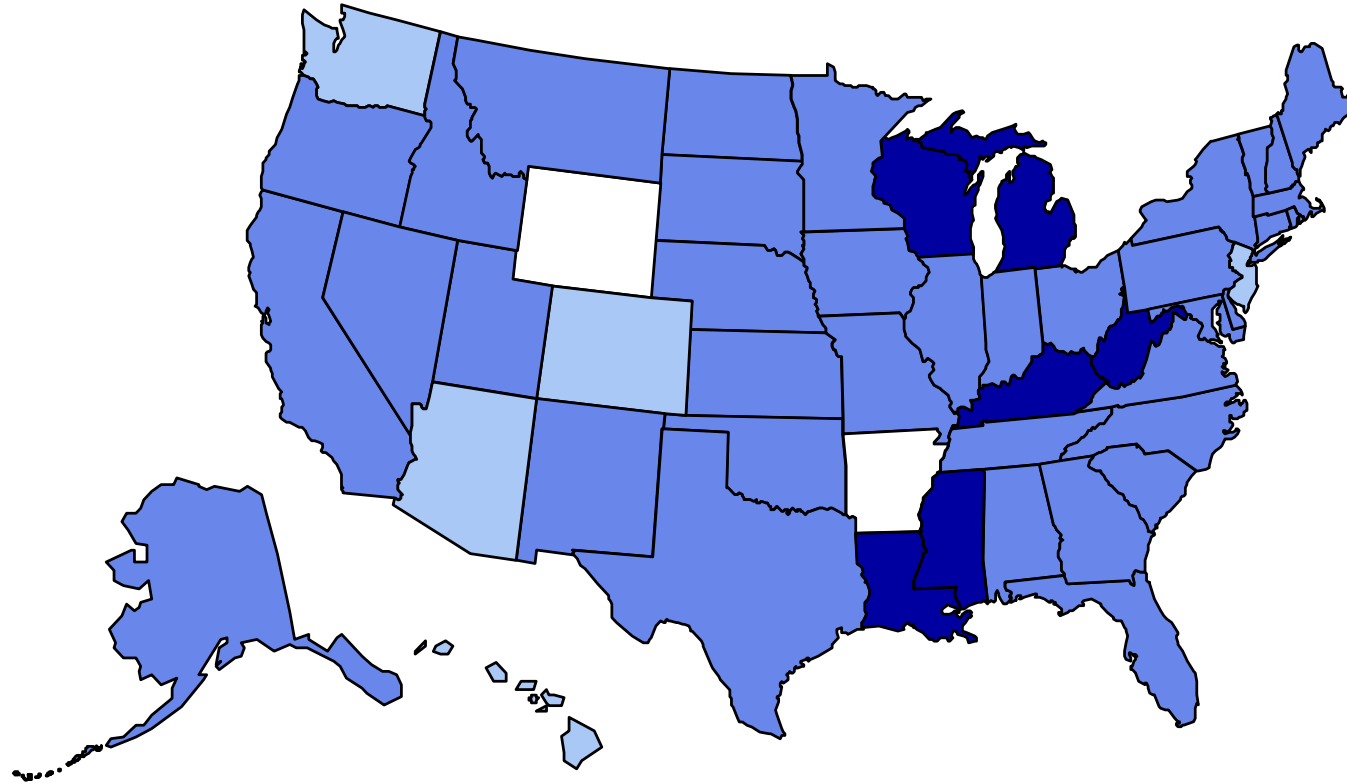
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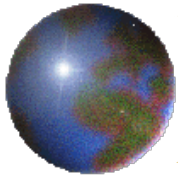




1992

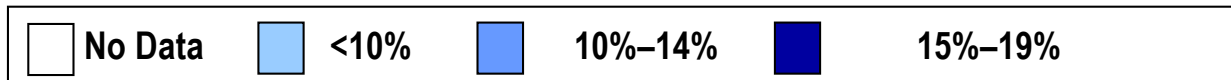
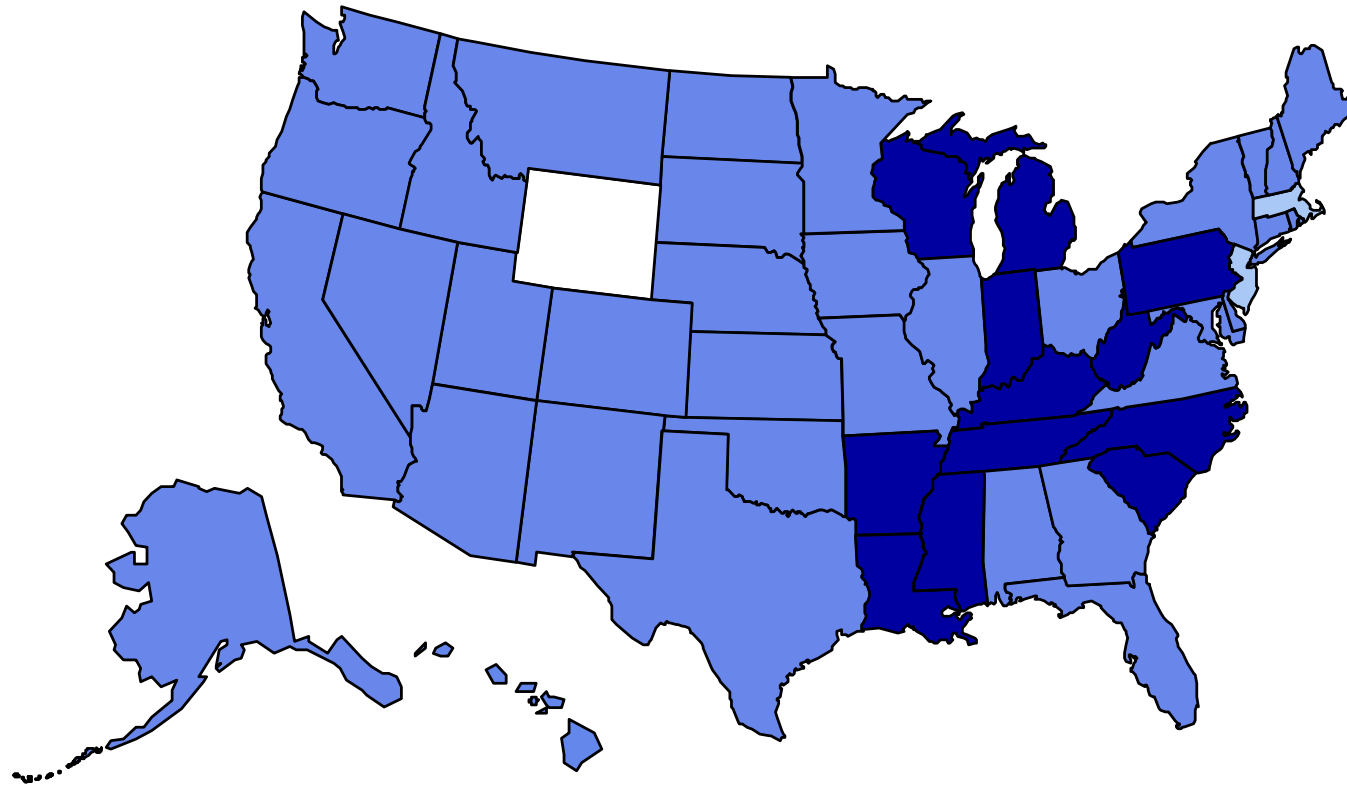
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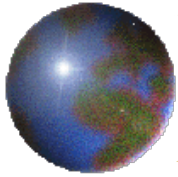




1993

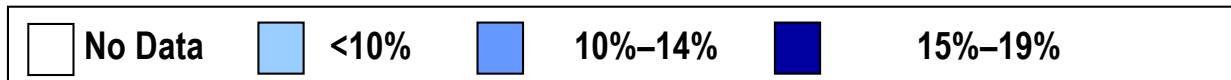
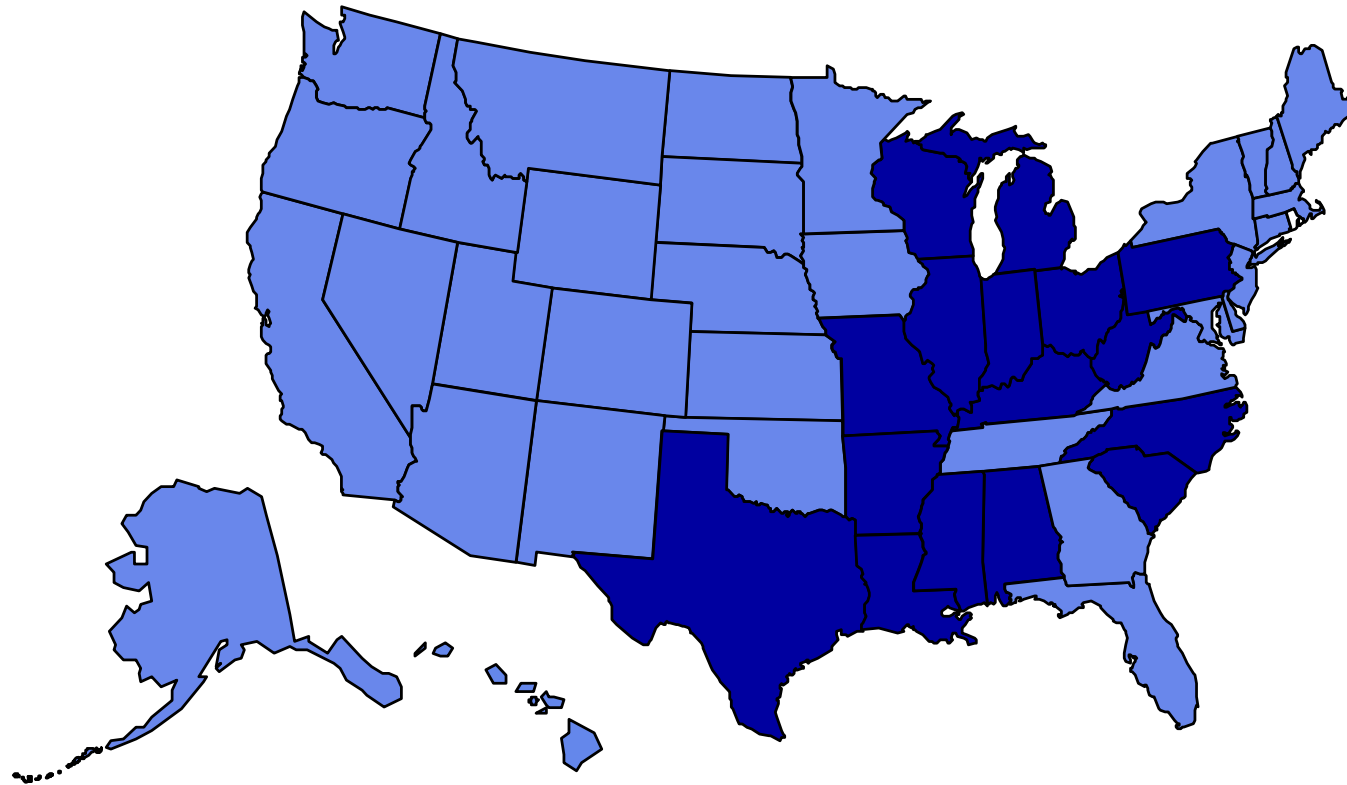
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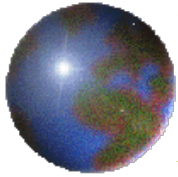




1994

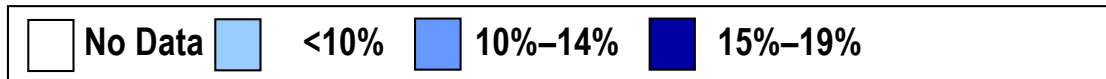
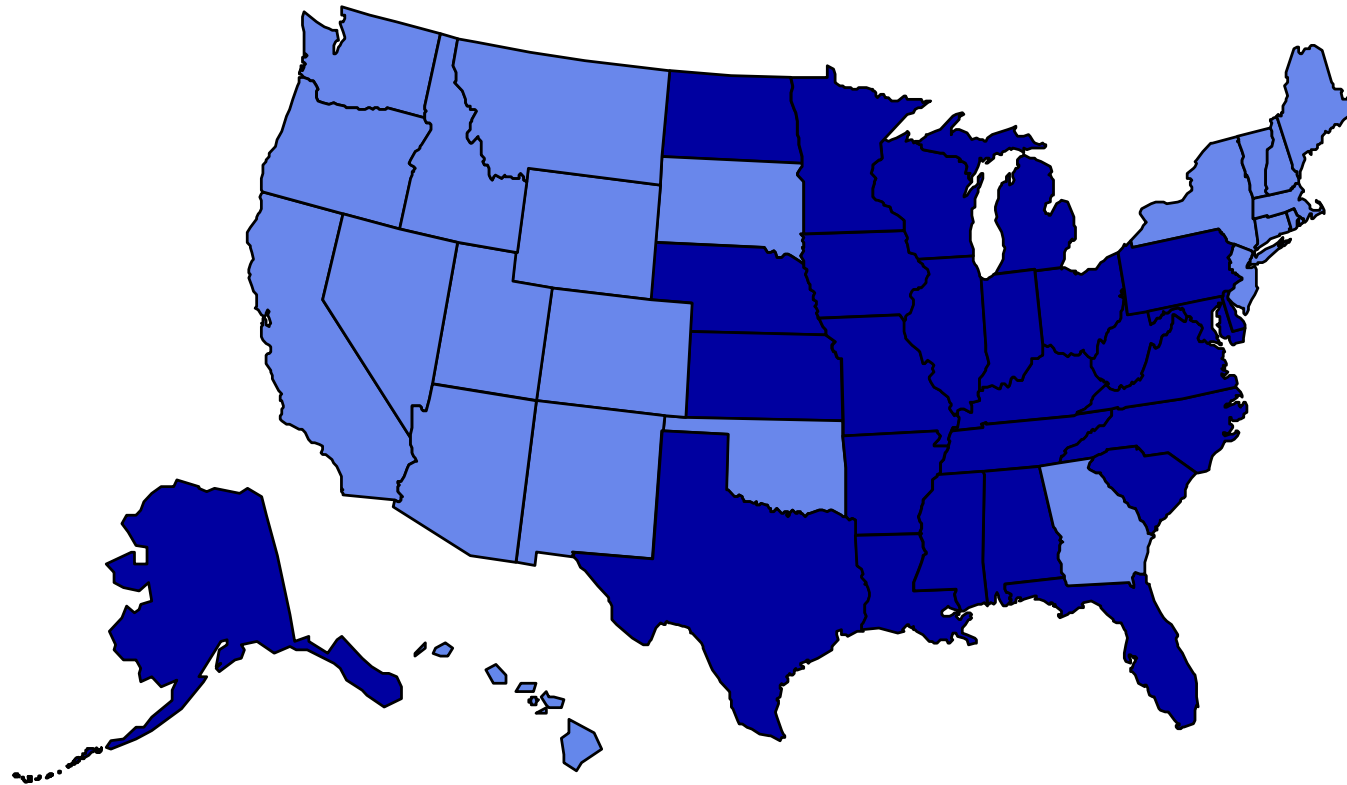
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)

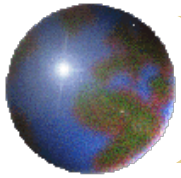




1995

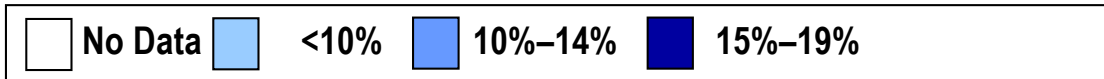
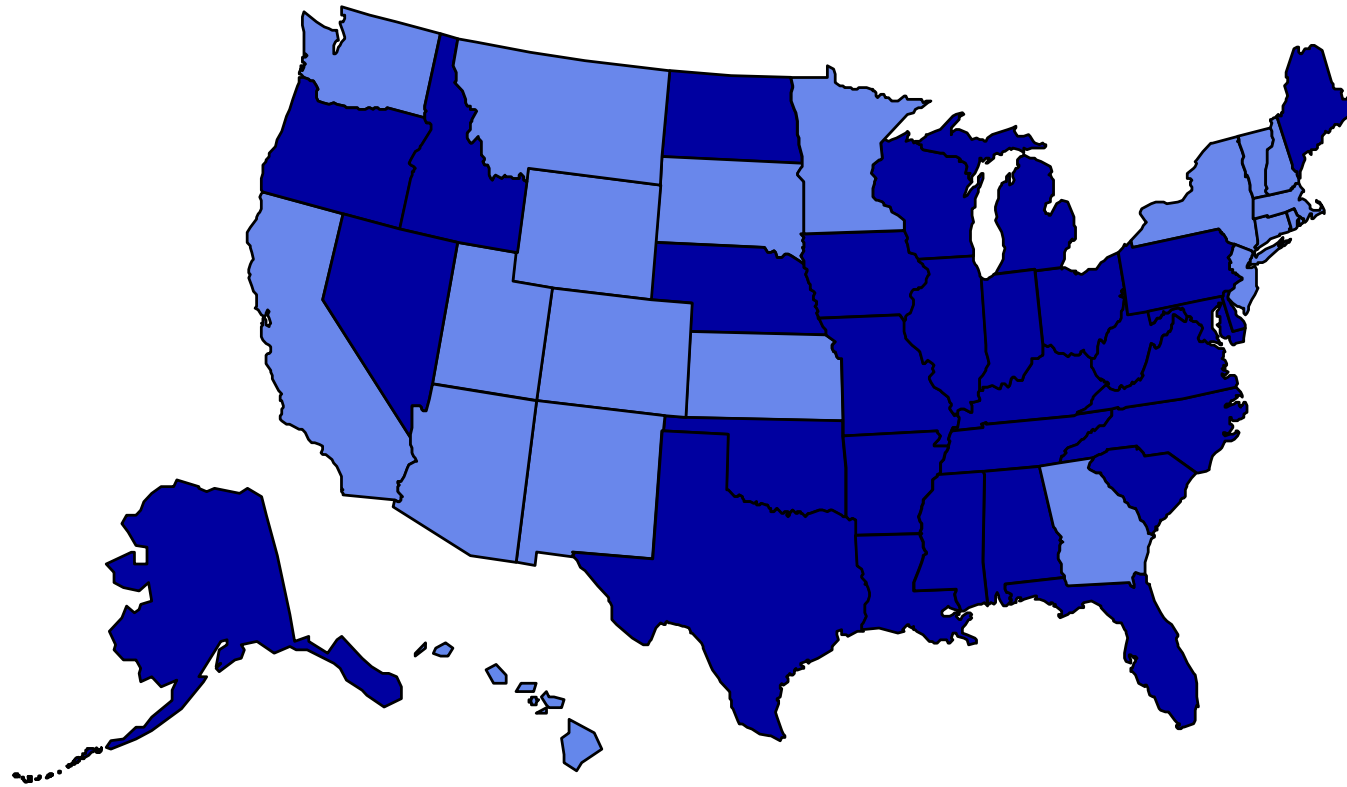
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)

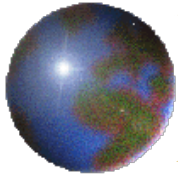




1996

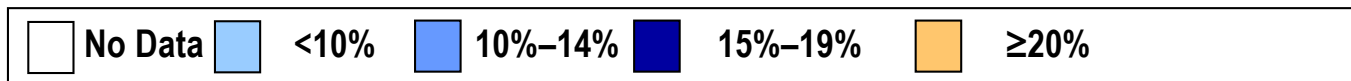
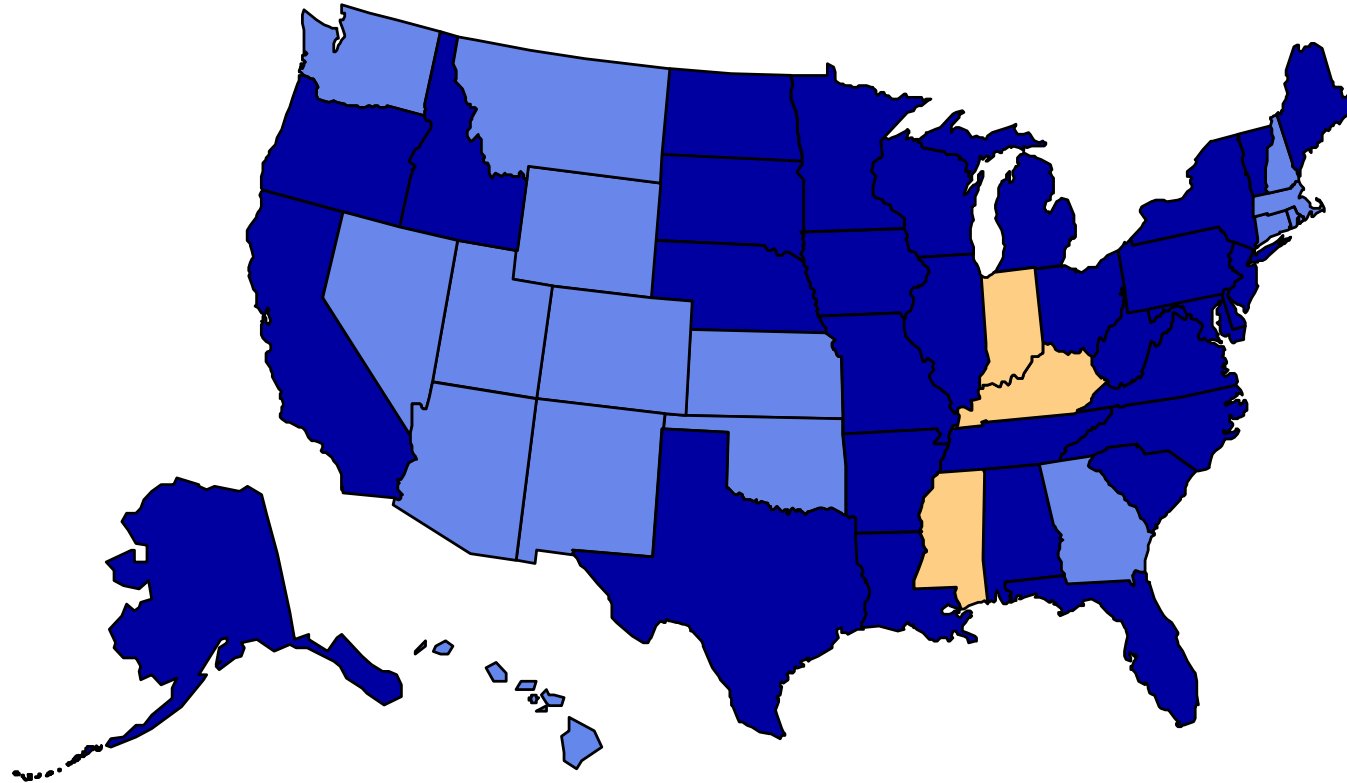
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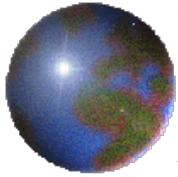




1997

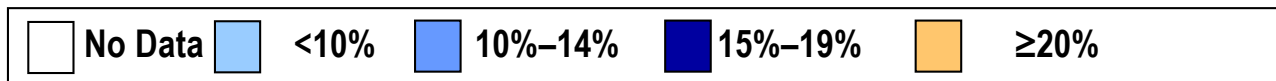
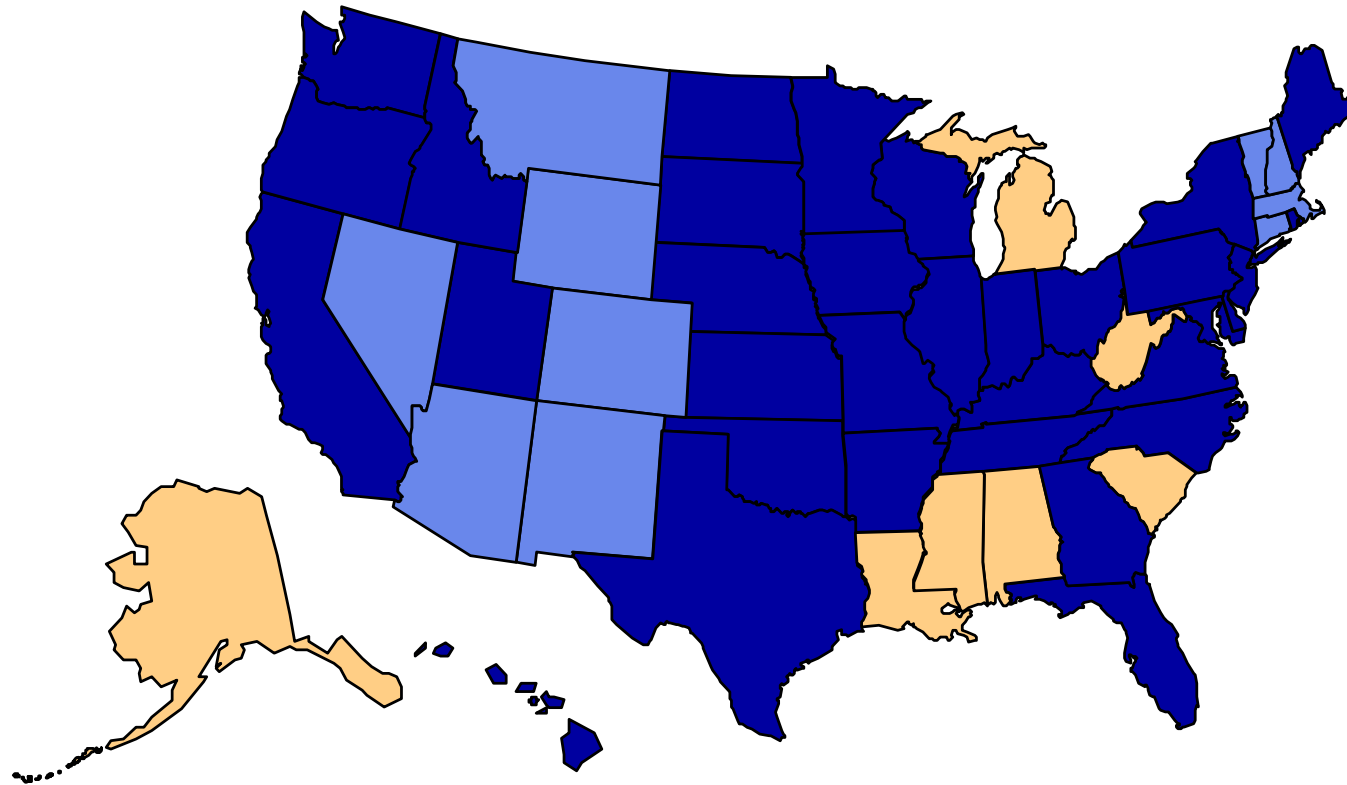
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)

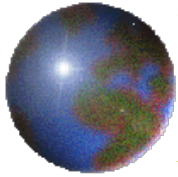




1998

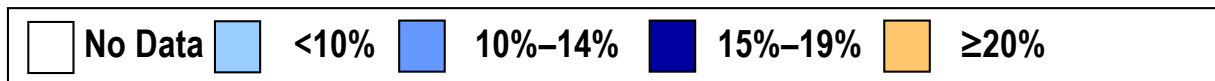
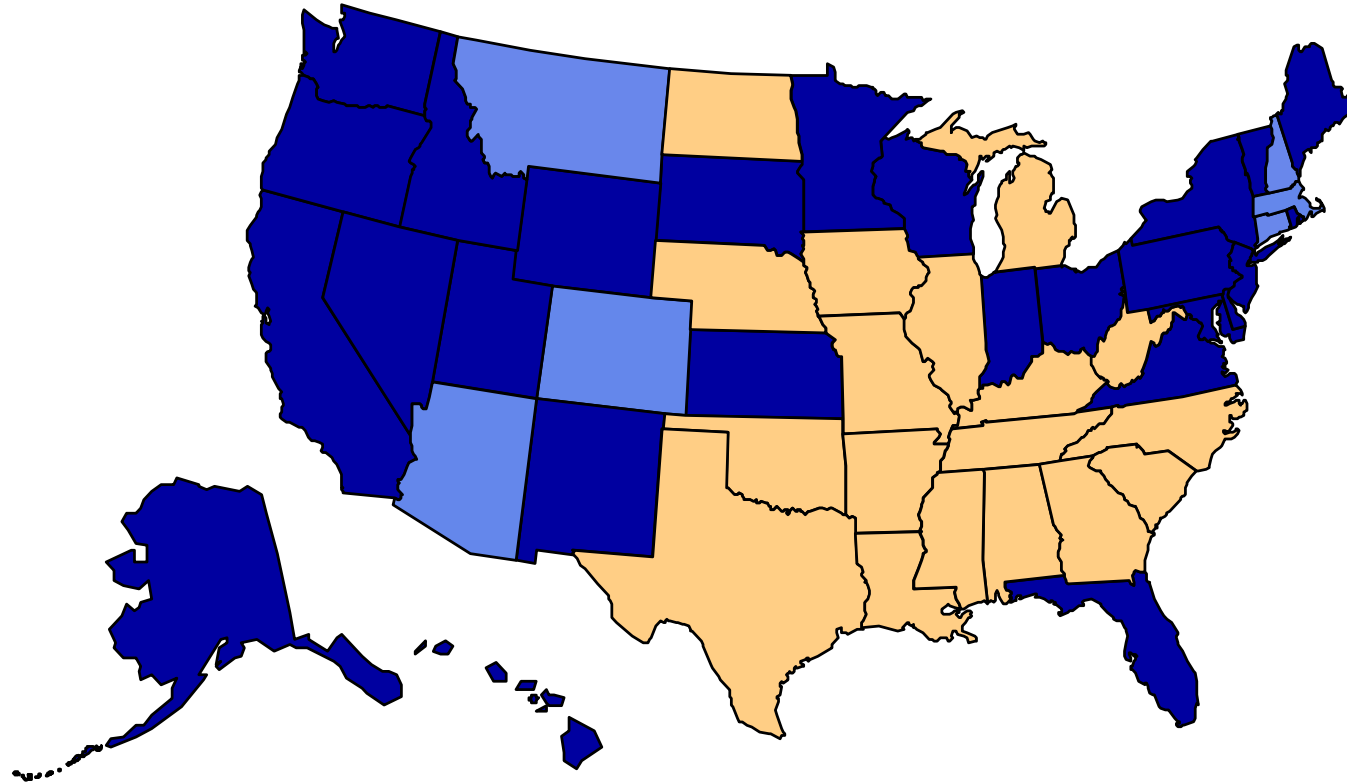
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)

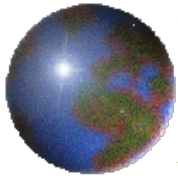




1999

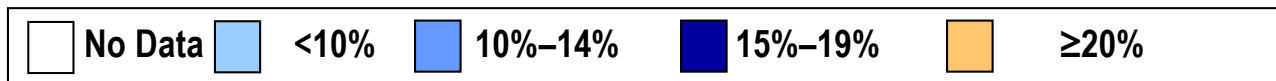
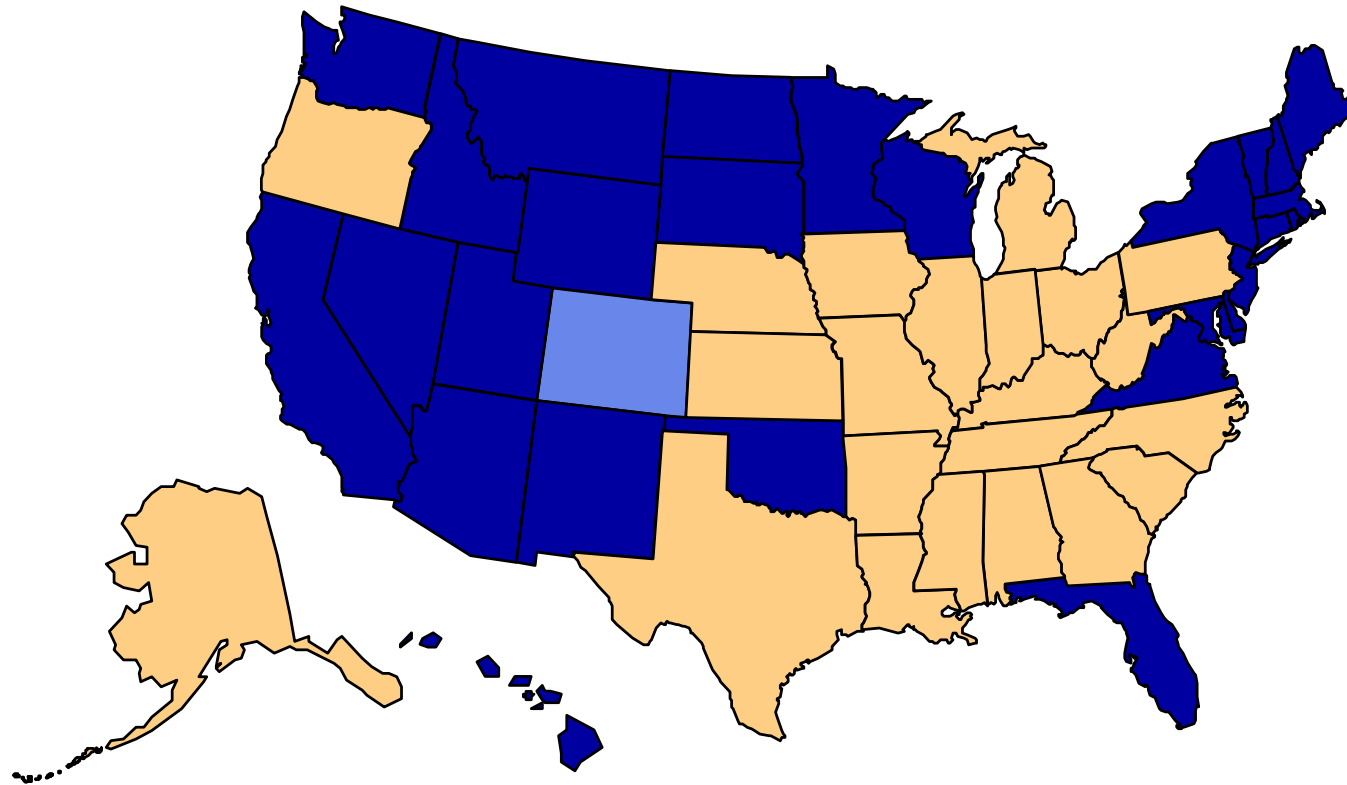
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)

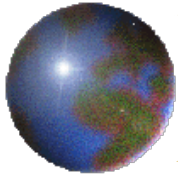




2000

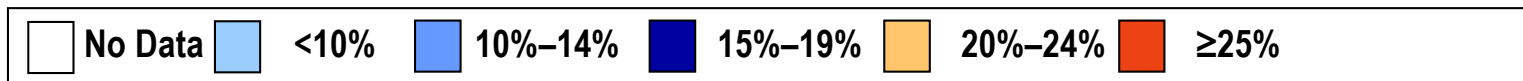
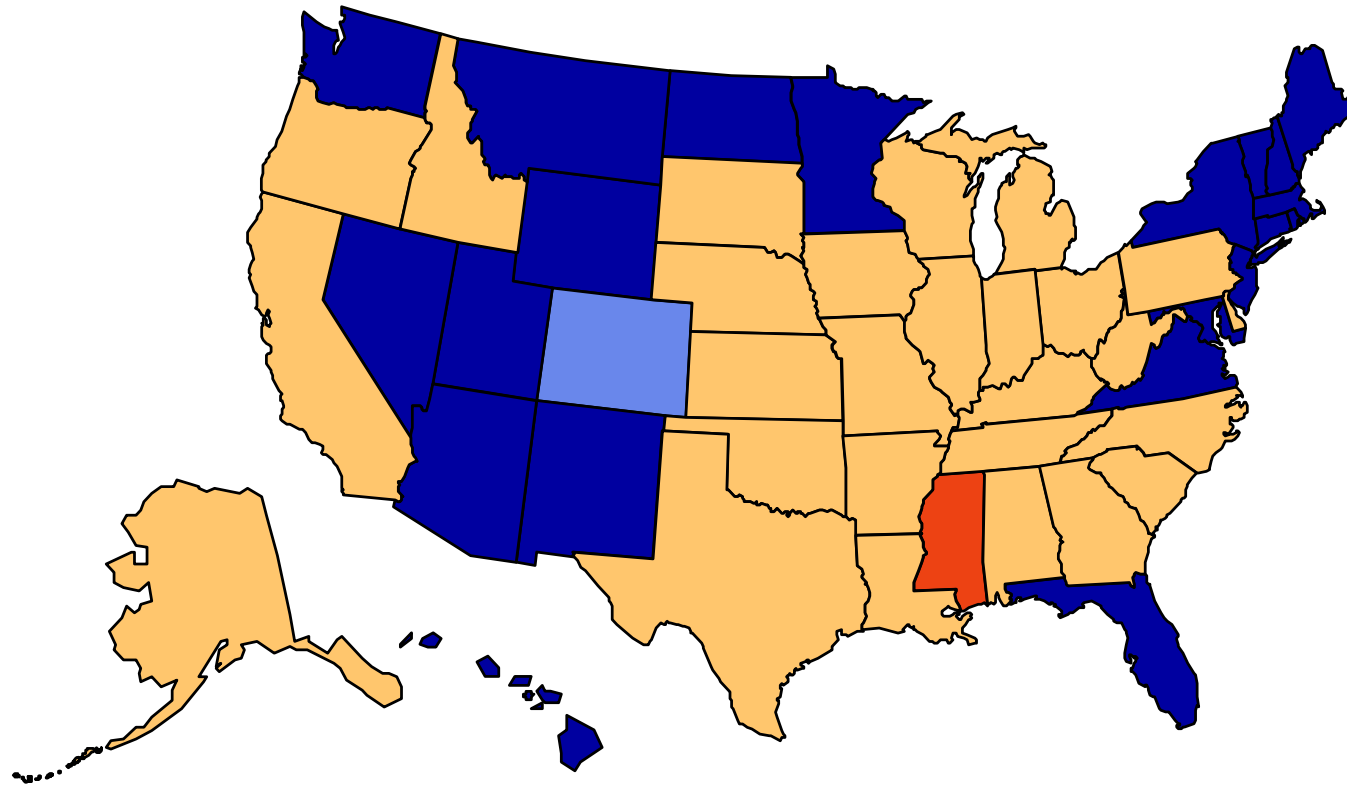
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)

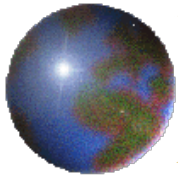




2001

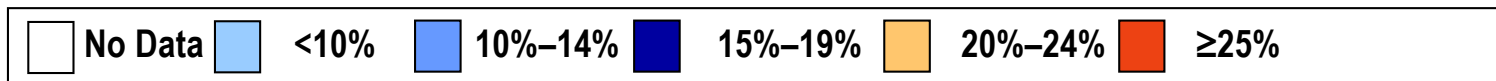
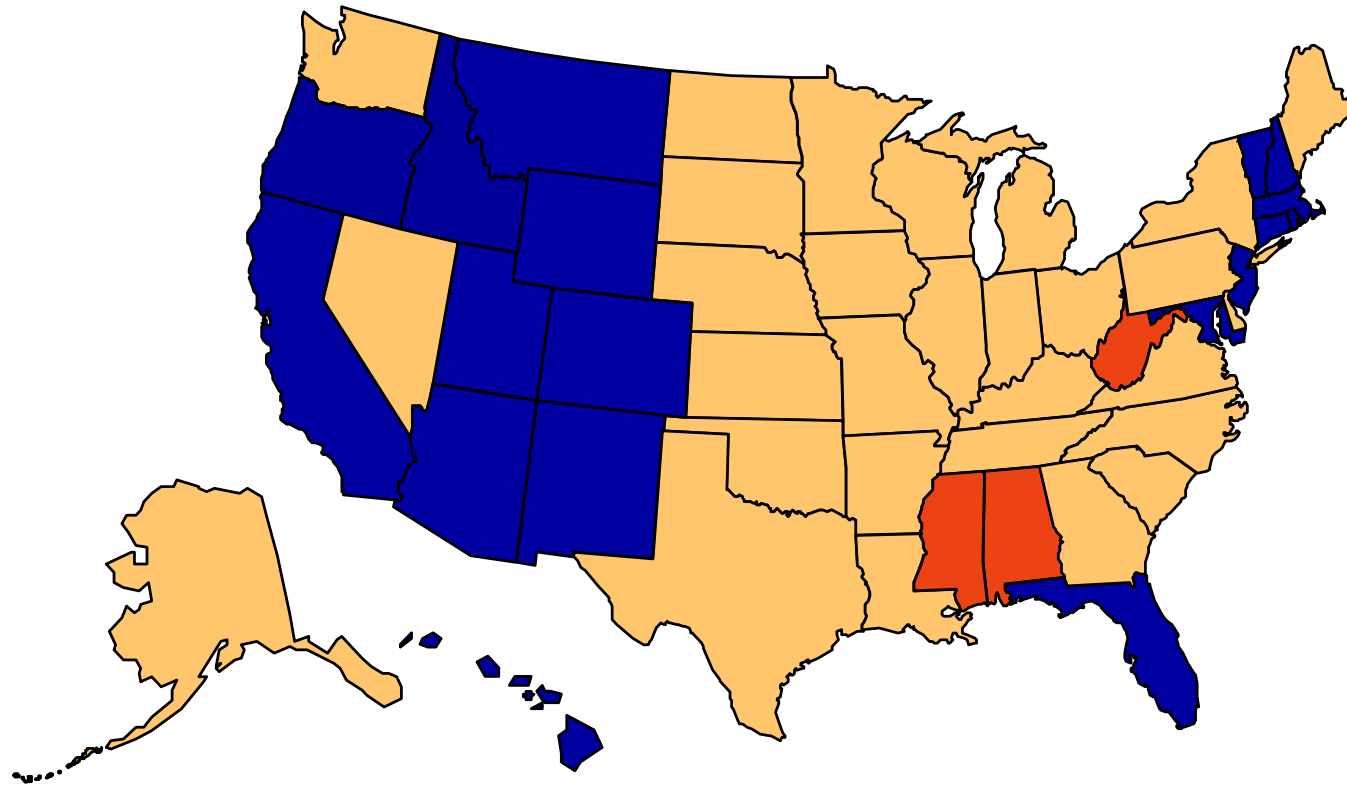
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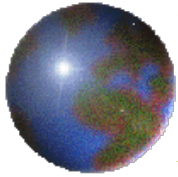




2002

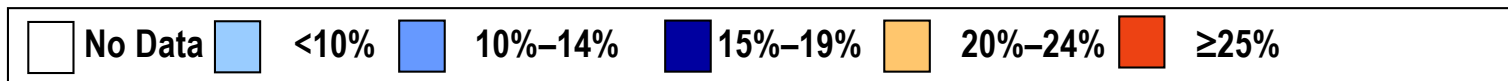
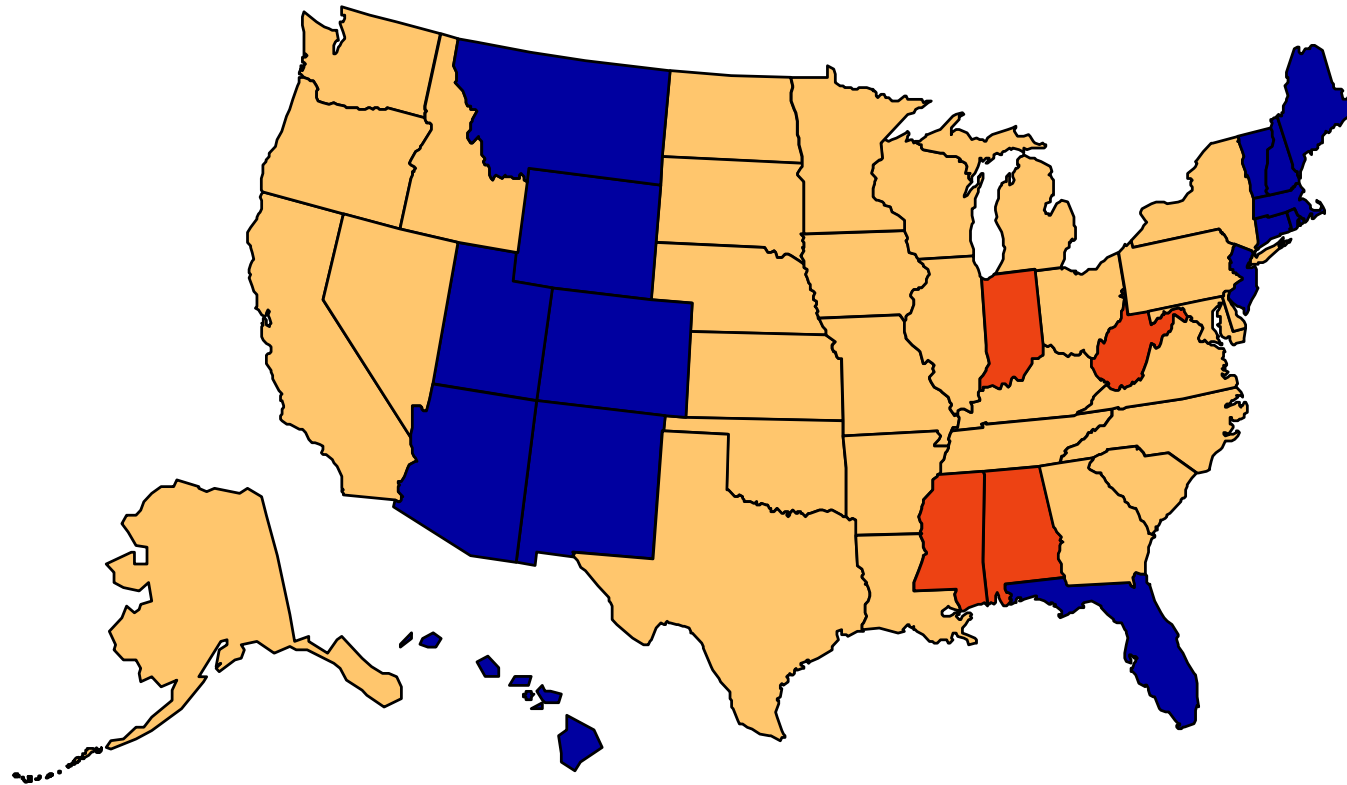
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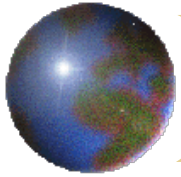




2003

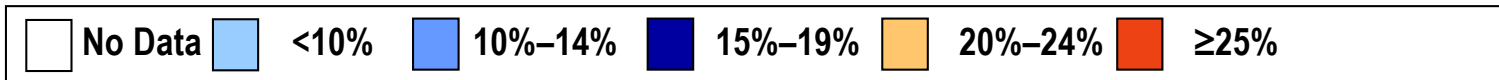
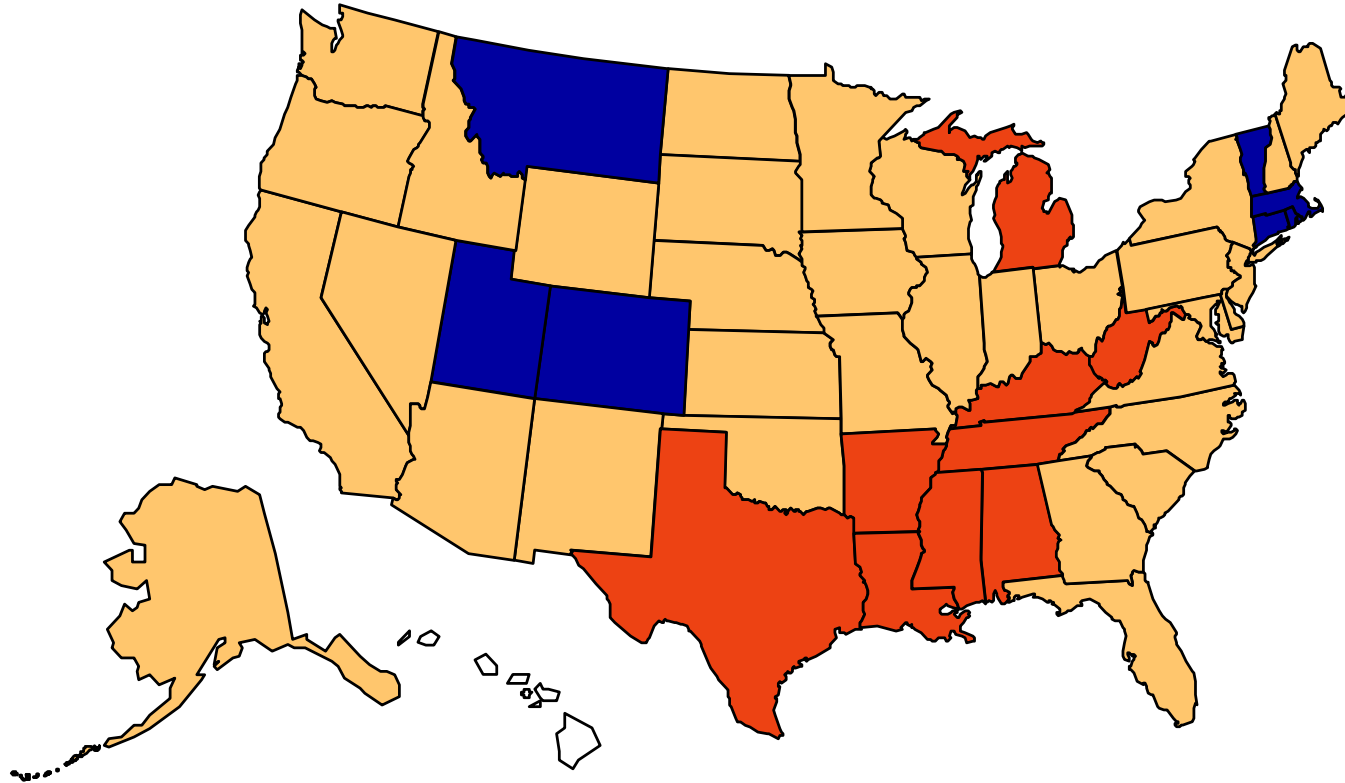
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)

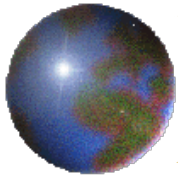




2004

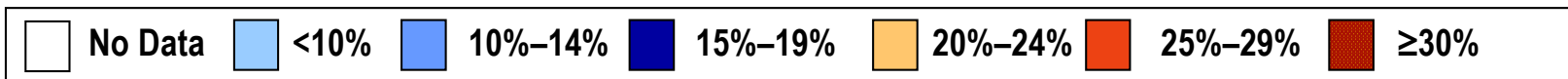
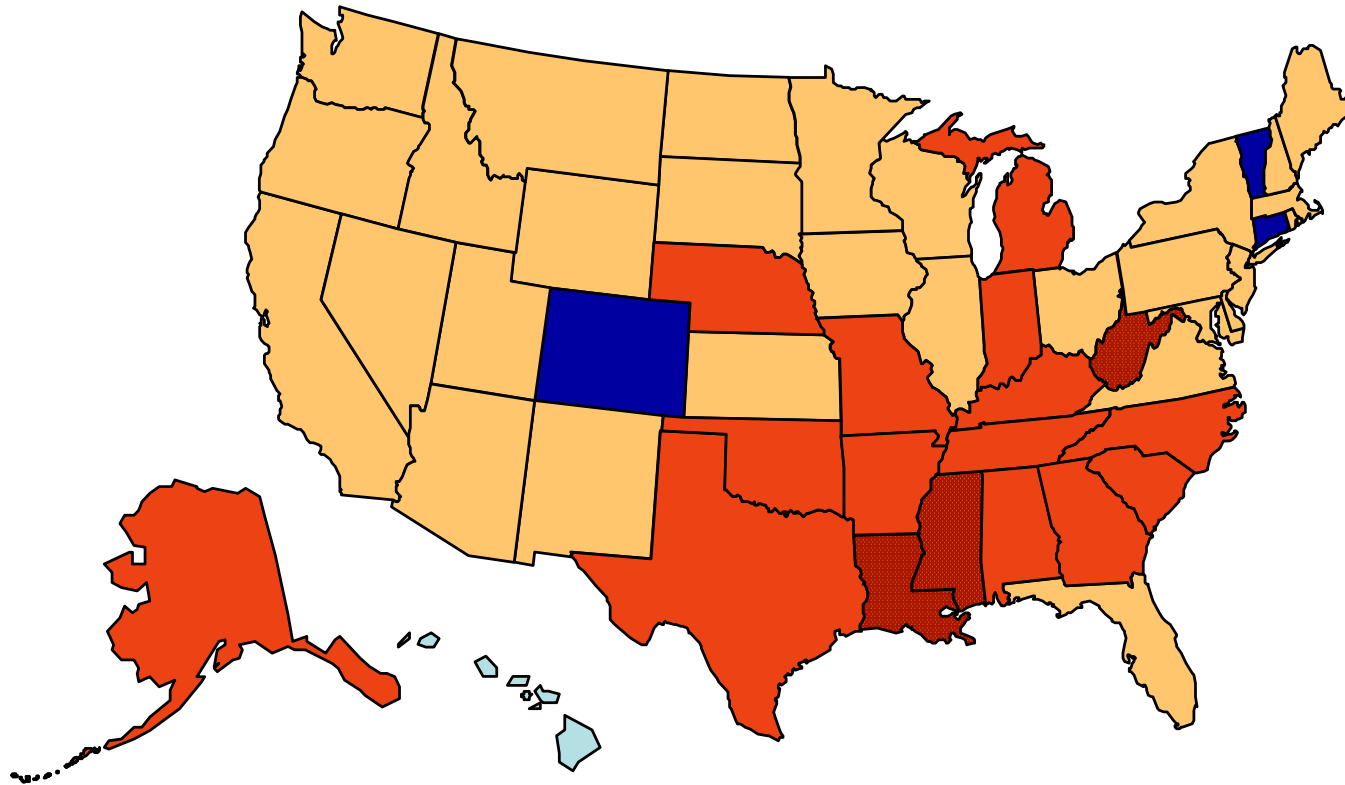
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)

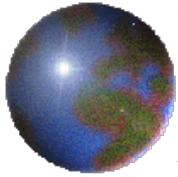




2005

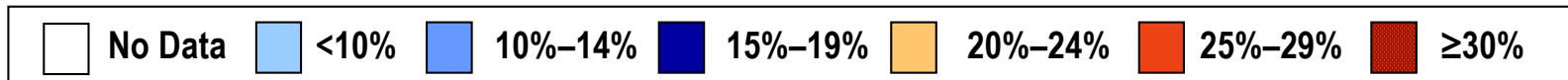
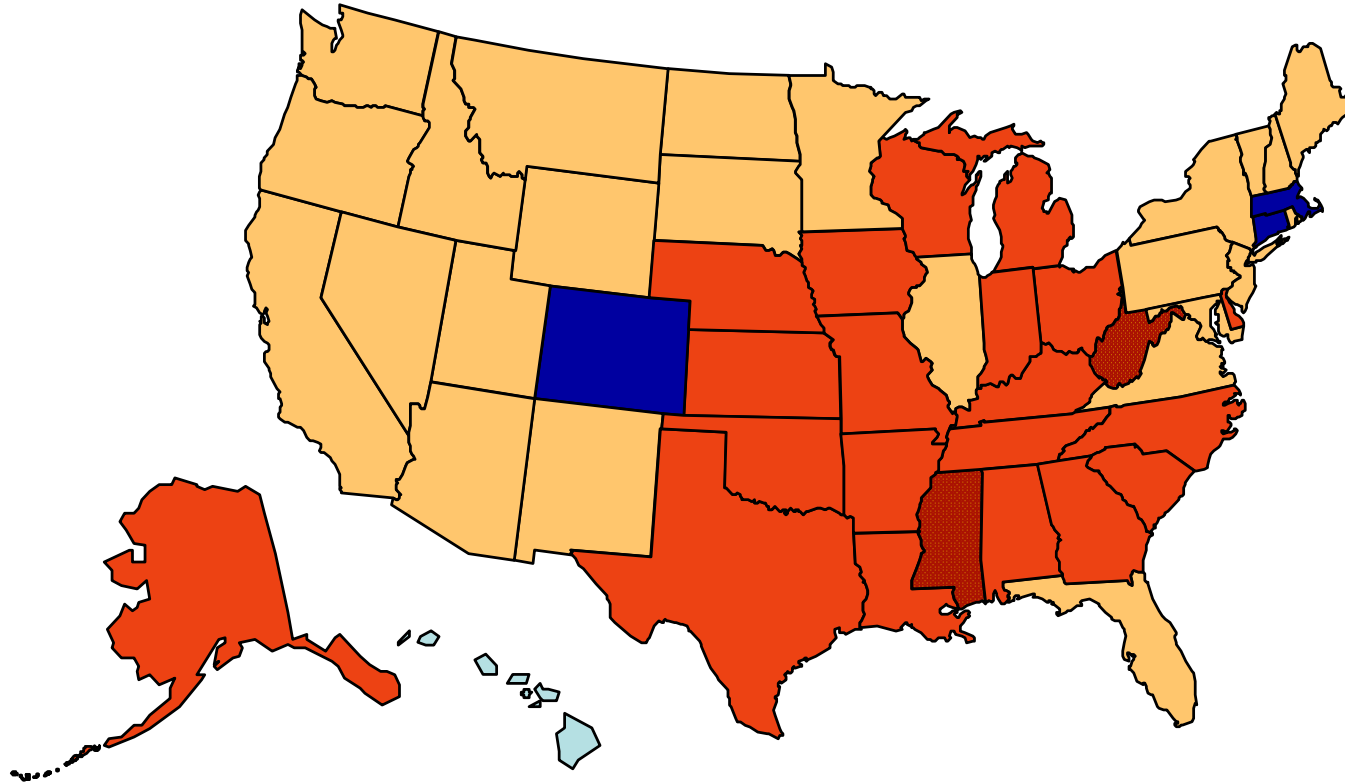
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)

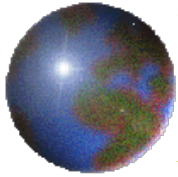




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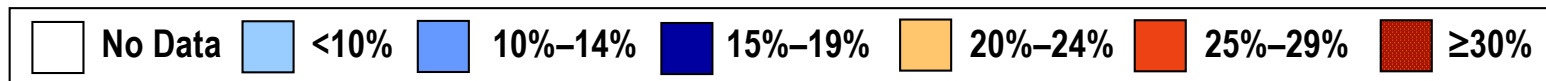
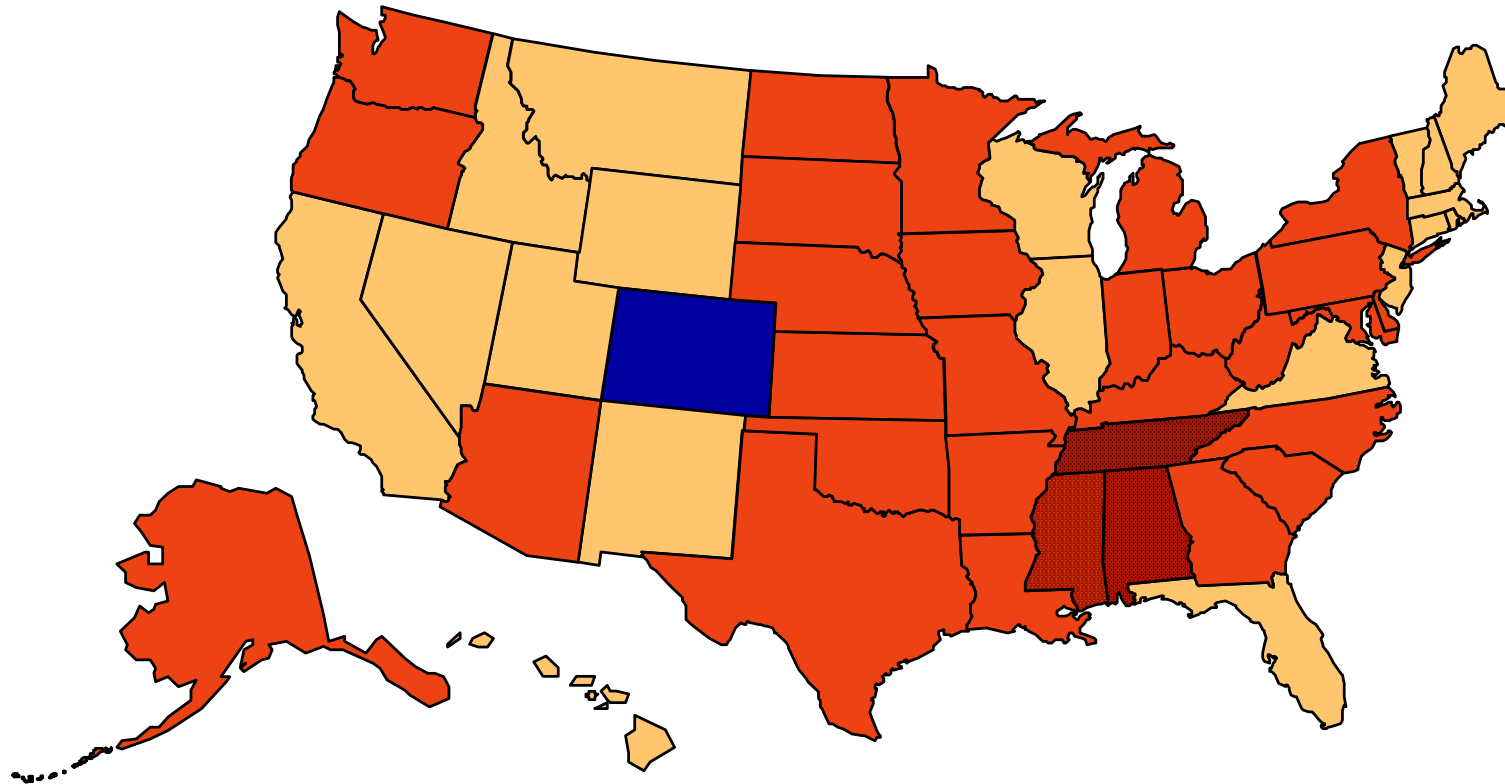
(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)

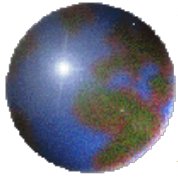




2007

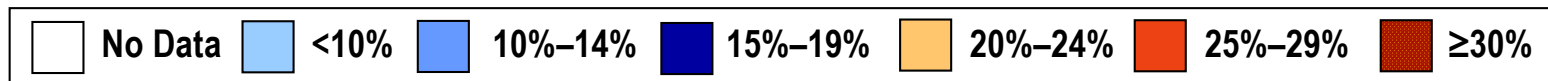
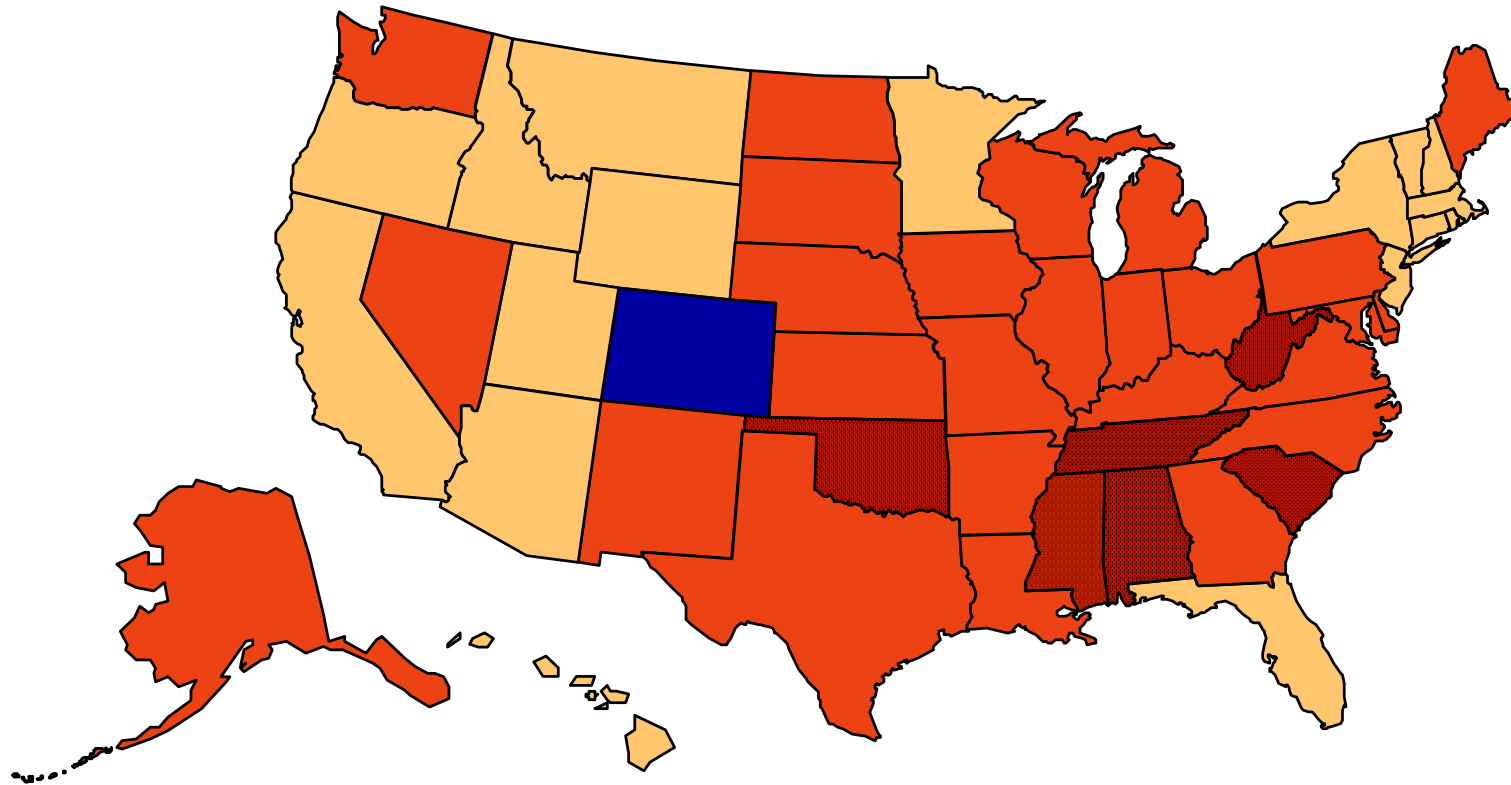
(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)

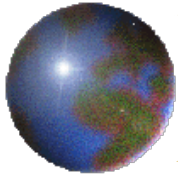




2008

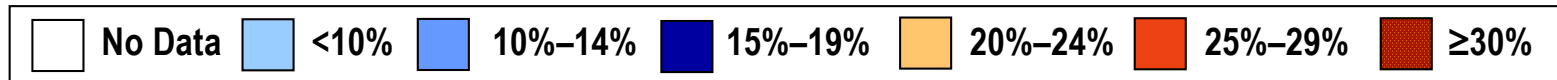
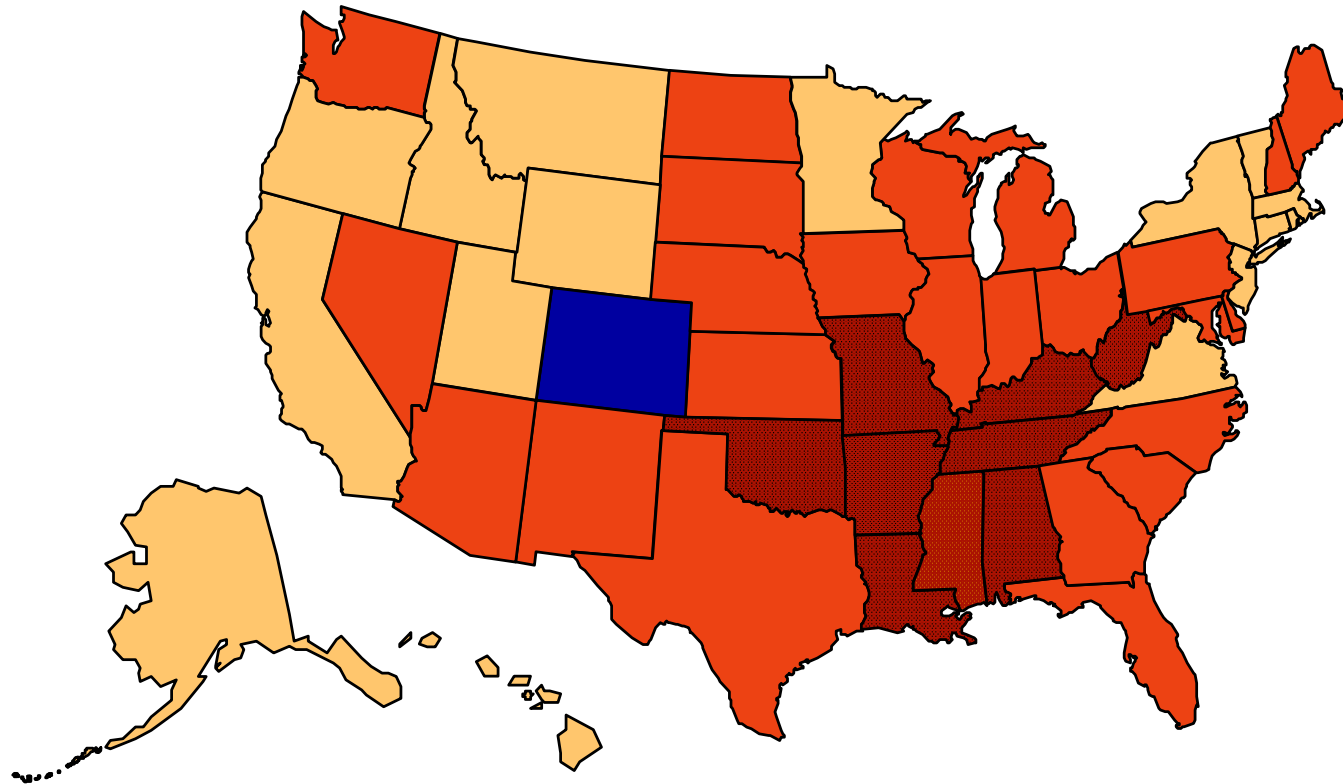
(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)

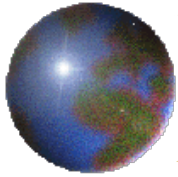




2009

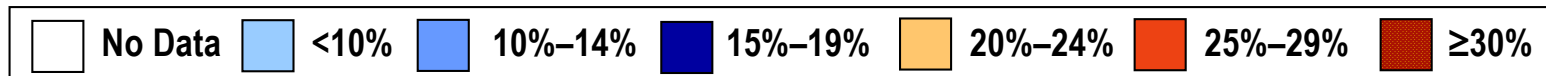
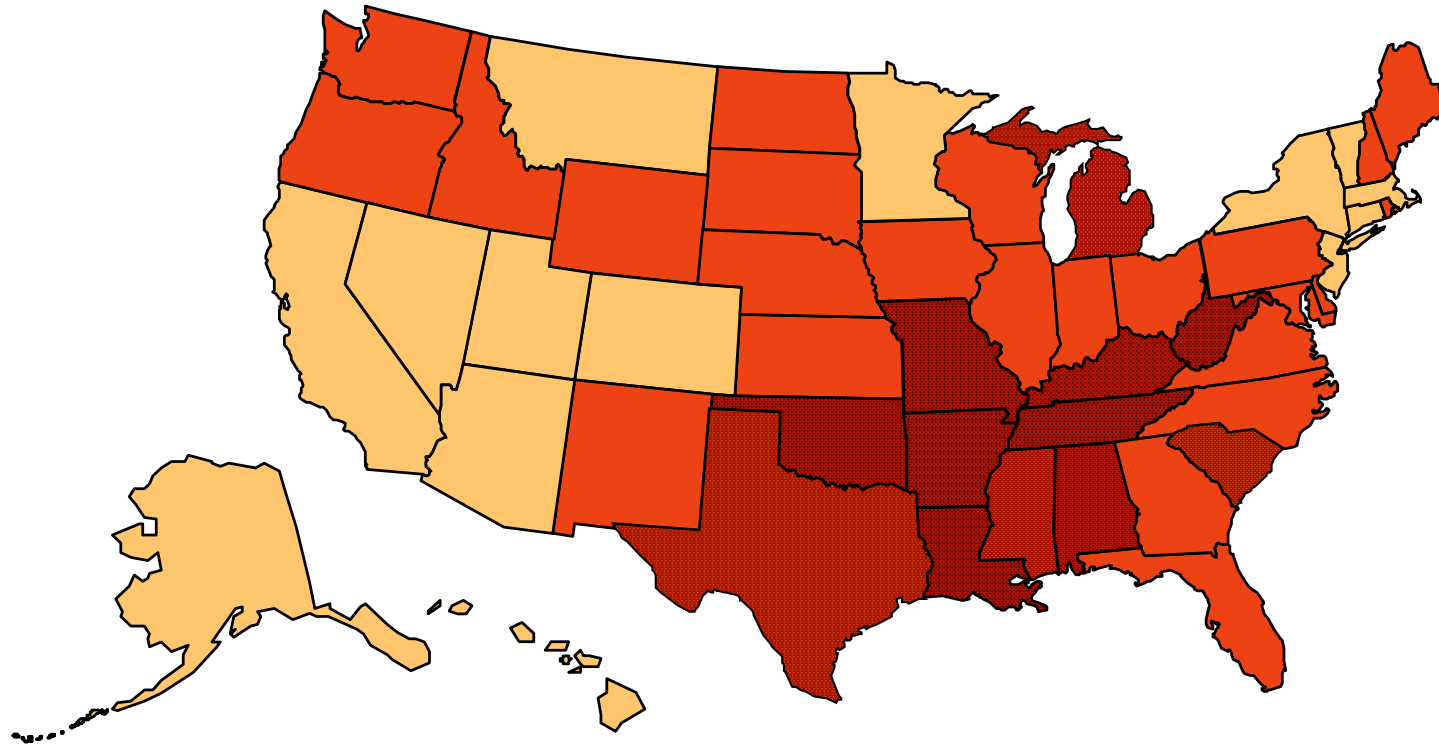
(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)

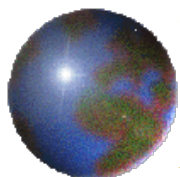




2010

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)

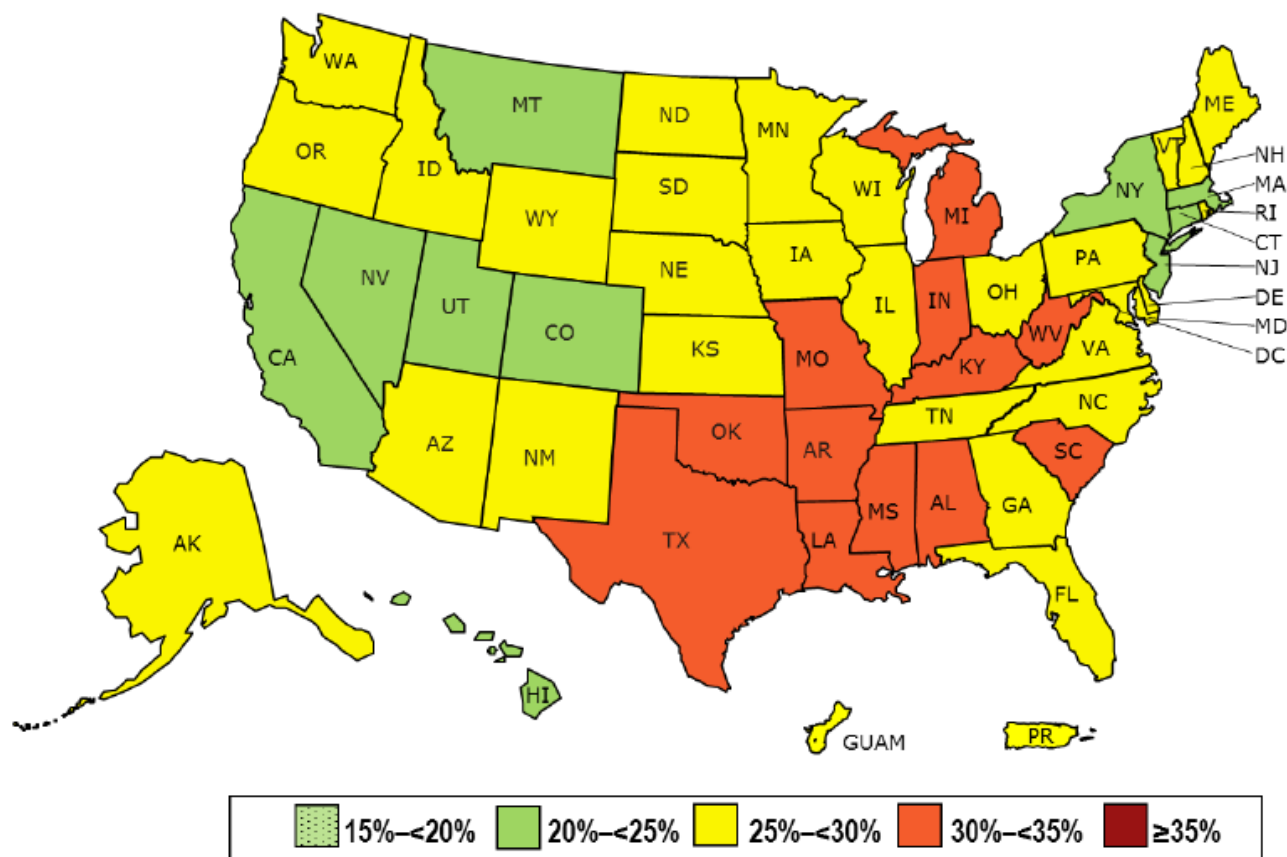




2011

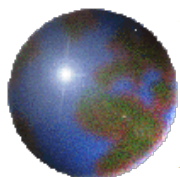
Prevalence* of Self-Reported Obesity Among U.S. Adults by State and Territory, BRFSS, 2011

*Prevalence estimates reflect BRFSS methodological changes started in 2011. These estimates should not be compared to prevalence estimates before 2011.



Source: Behavioral Risk Factor Surveillance System, CDC.

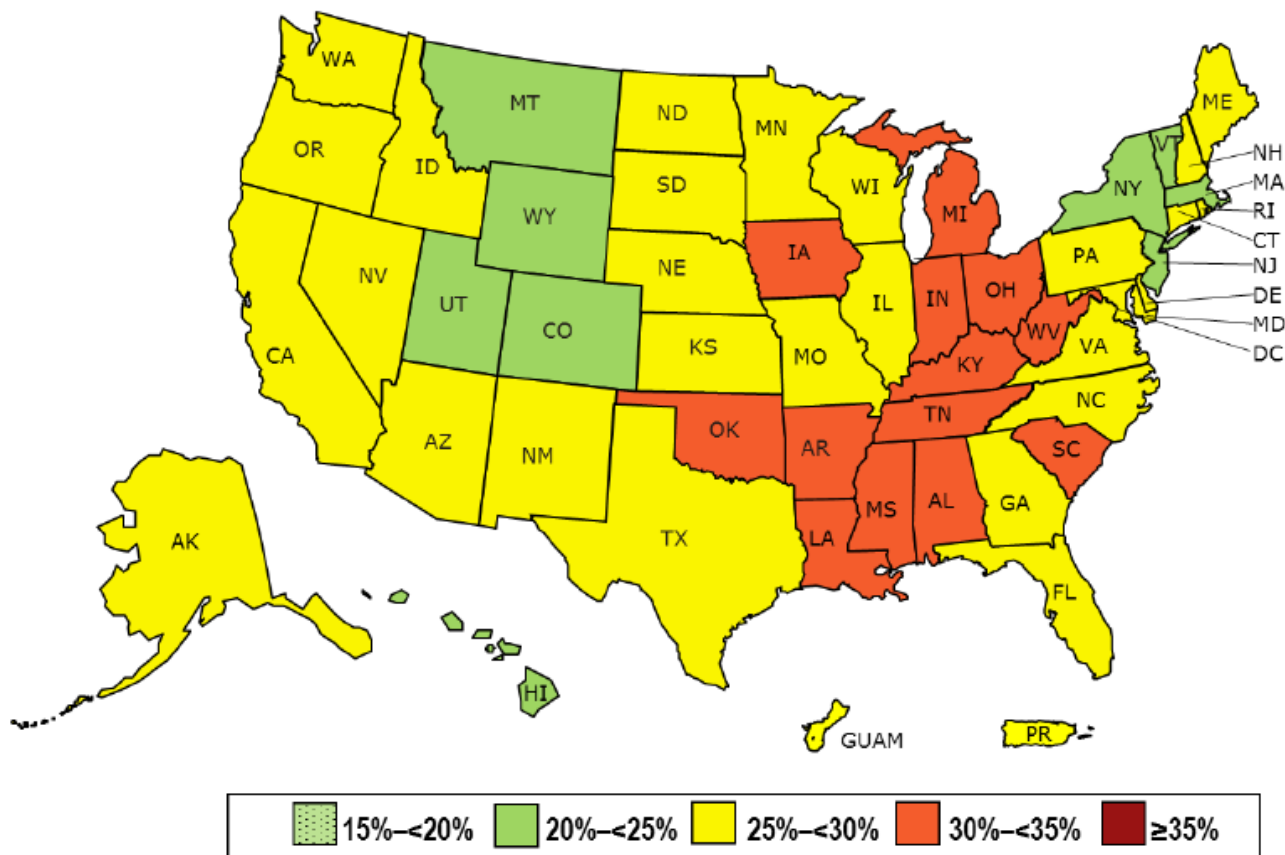




2012

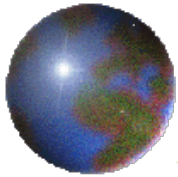
Prevalence* of Self-Reported Obesity Among U.S. Adults by State and Territory, BRFSS, 2012

*Prevalence estimates reflect BRFSS methodological changes started in 2011. These estimates should not be compared to prevalence estimates before 2011.



Source: Behavioral Risk Factor Surveillance System, CDC.

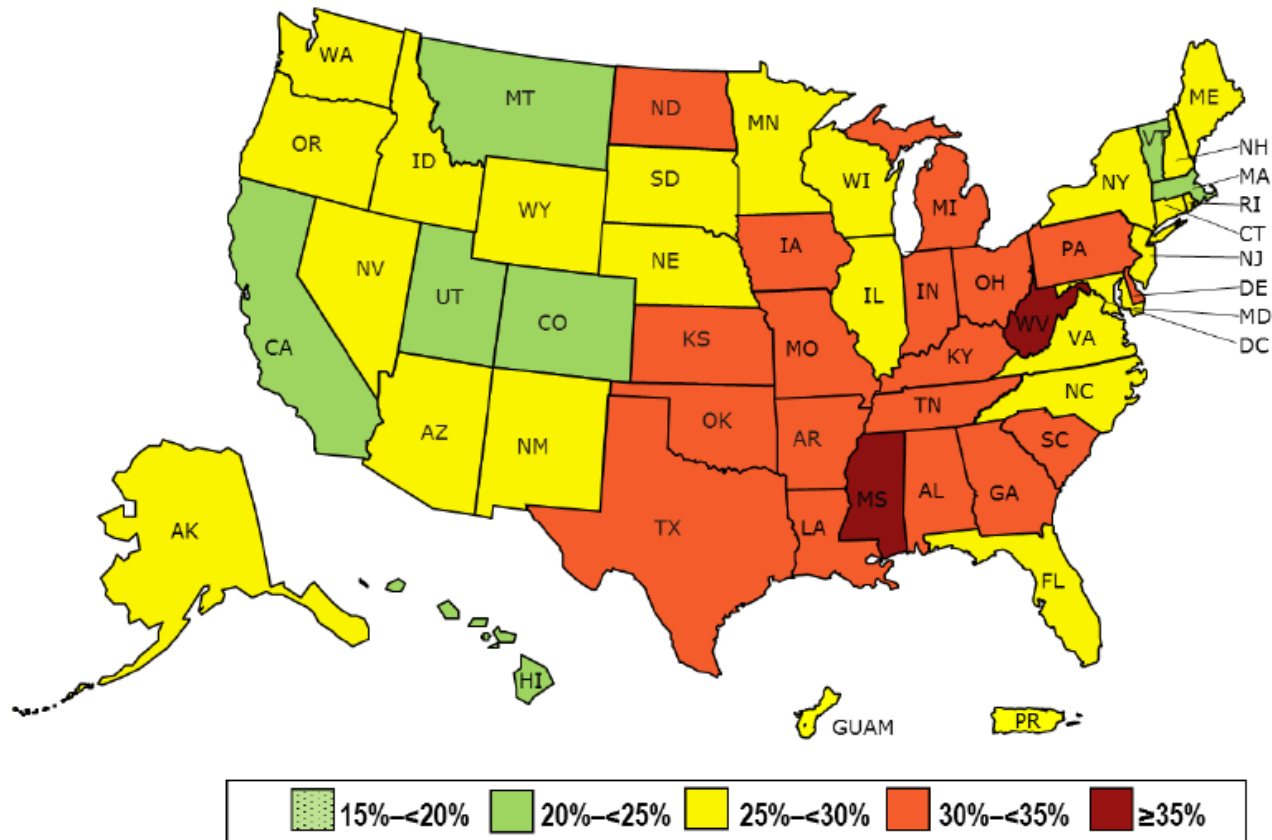




2013

Prevalence* of Self-Reported Obesity Among U.S. Adults by State and Territory, BRFSS, 2013

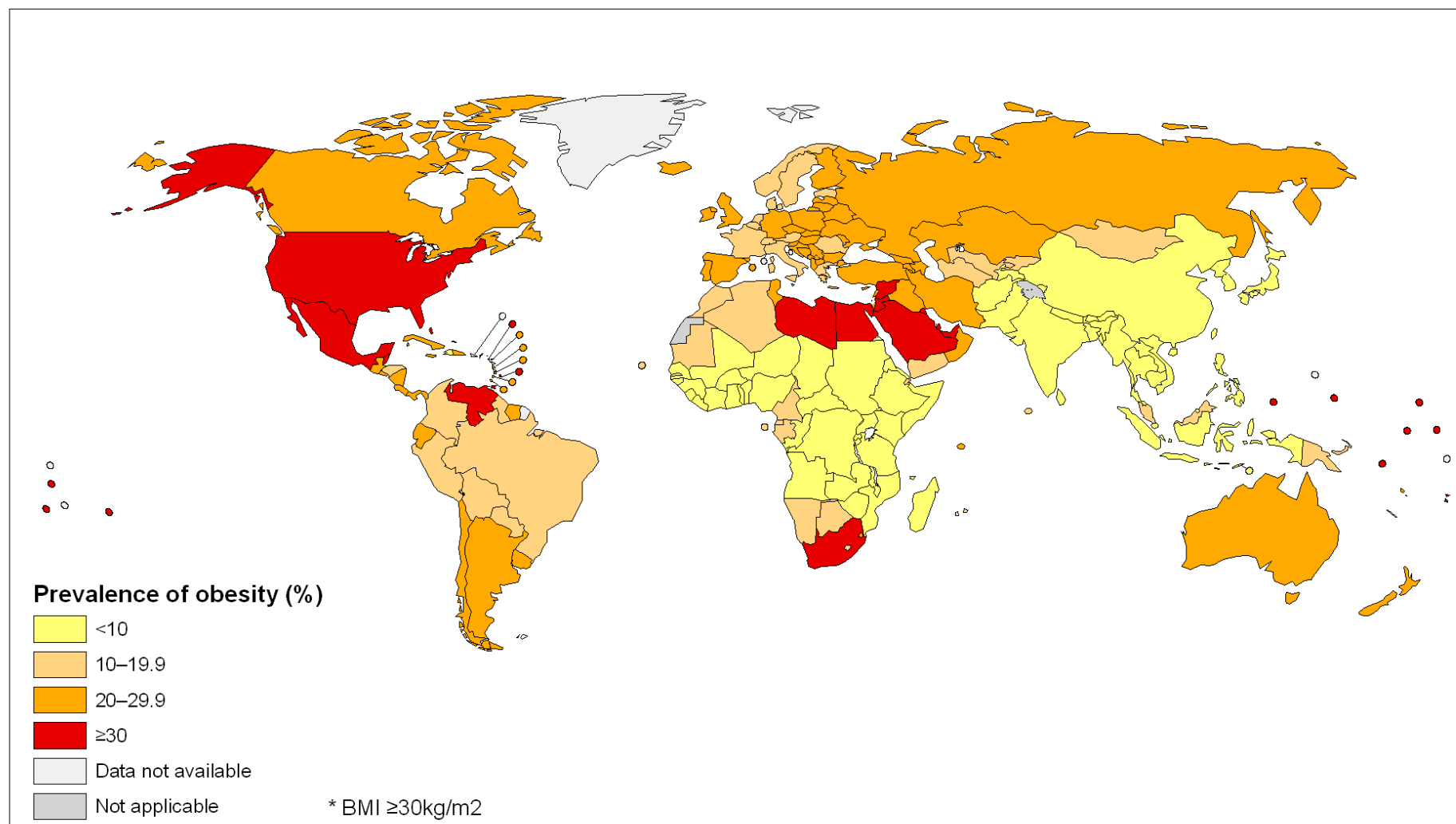
*Prevalence estimates reflect BRFSS methodological changes started in 2011. These estimates should not be compared to prevalence estimates before 2011.



Source: Behavioral Risk Factor Surveillance System, CDC.



Prevalence of obesity*, ages 20+, age standardized Both sexes, 2008



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization
Map Production: Public Health Information
and Geographic Information Systems (GIS)
World Health Organization



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THE IMPACT OF CHRONIC DISEASE IN TURKEY

Chronic diseases are the major cause of death and disability worldwide

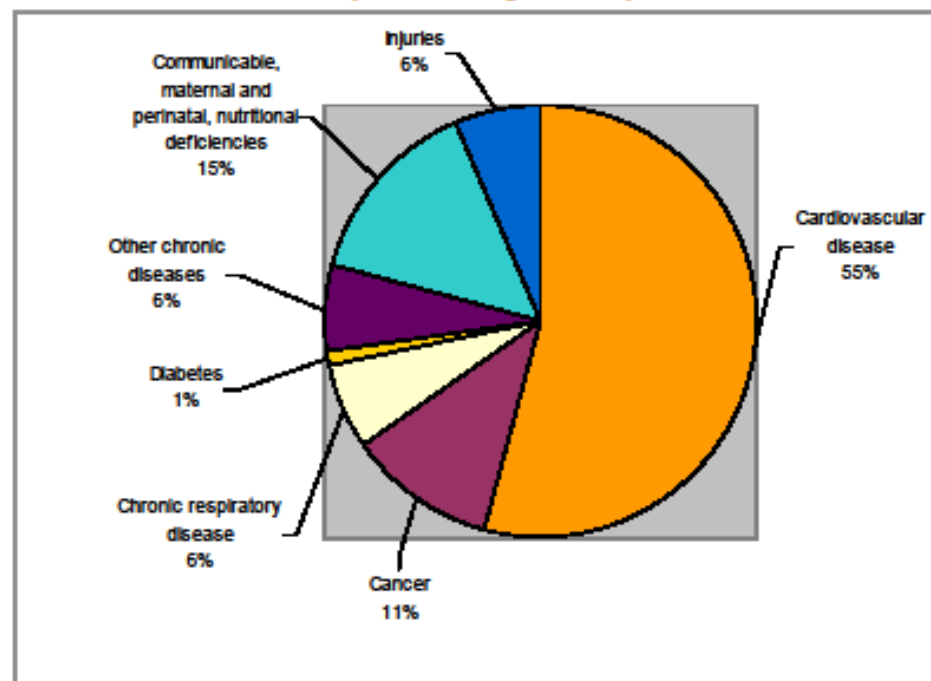
Facts:

- In Turkey, chronic diseases accounted for 79 % of all deaths in 2002 (see chart, right).
 - Total deaths in Turkey, 2002 = 437,000.
 - Total deaths related to chronic disease in Turkey, 2002 = 346,000.

Note:

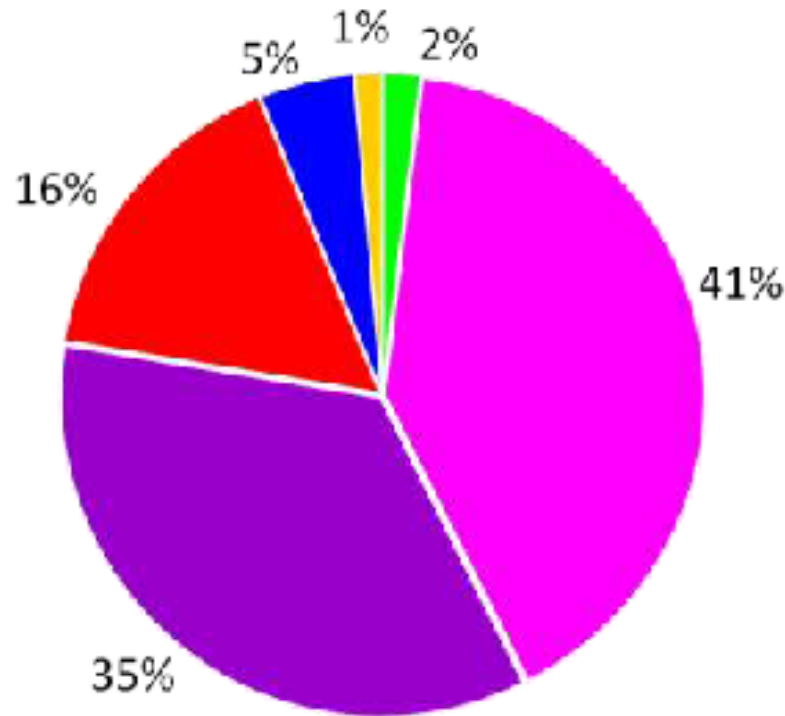
The data presented in this information sheet were estimated by WHO using standard methods to maximize cross-country comparability. They are not necessarily the official statistics of WHO Member States.

Deaths by cause, all ages, Turkey, 2002

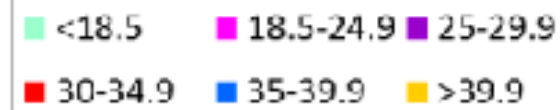
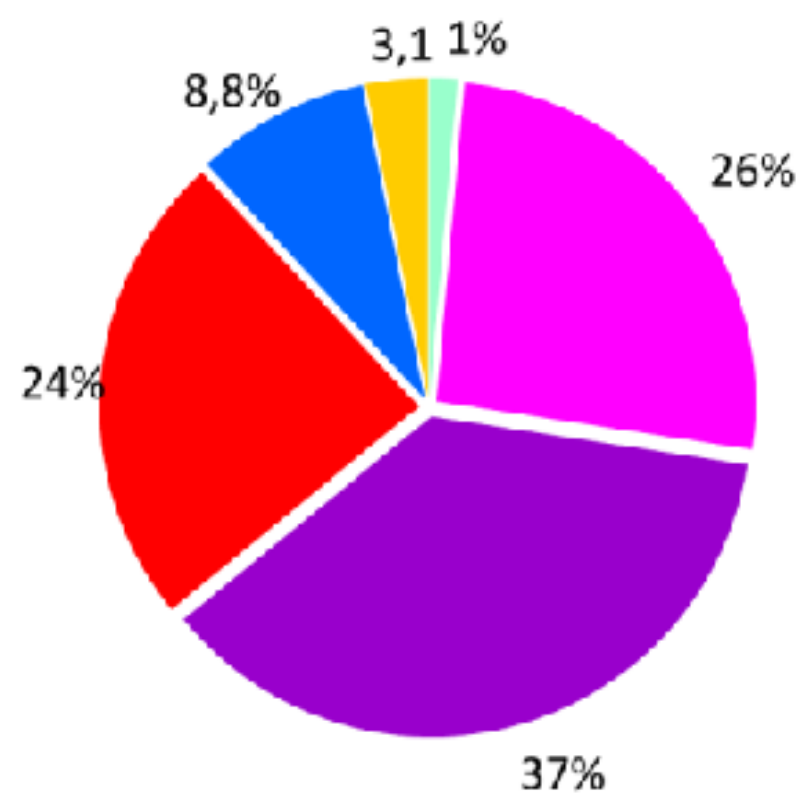


Türk Toplumunda BKİ Grupları Değişimi

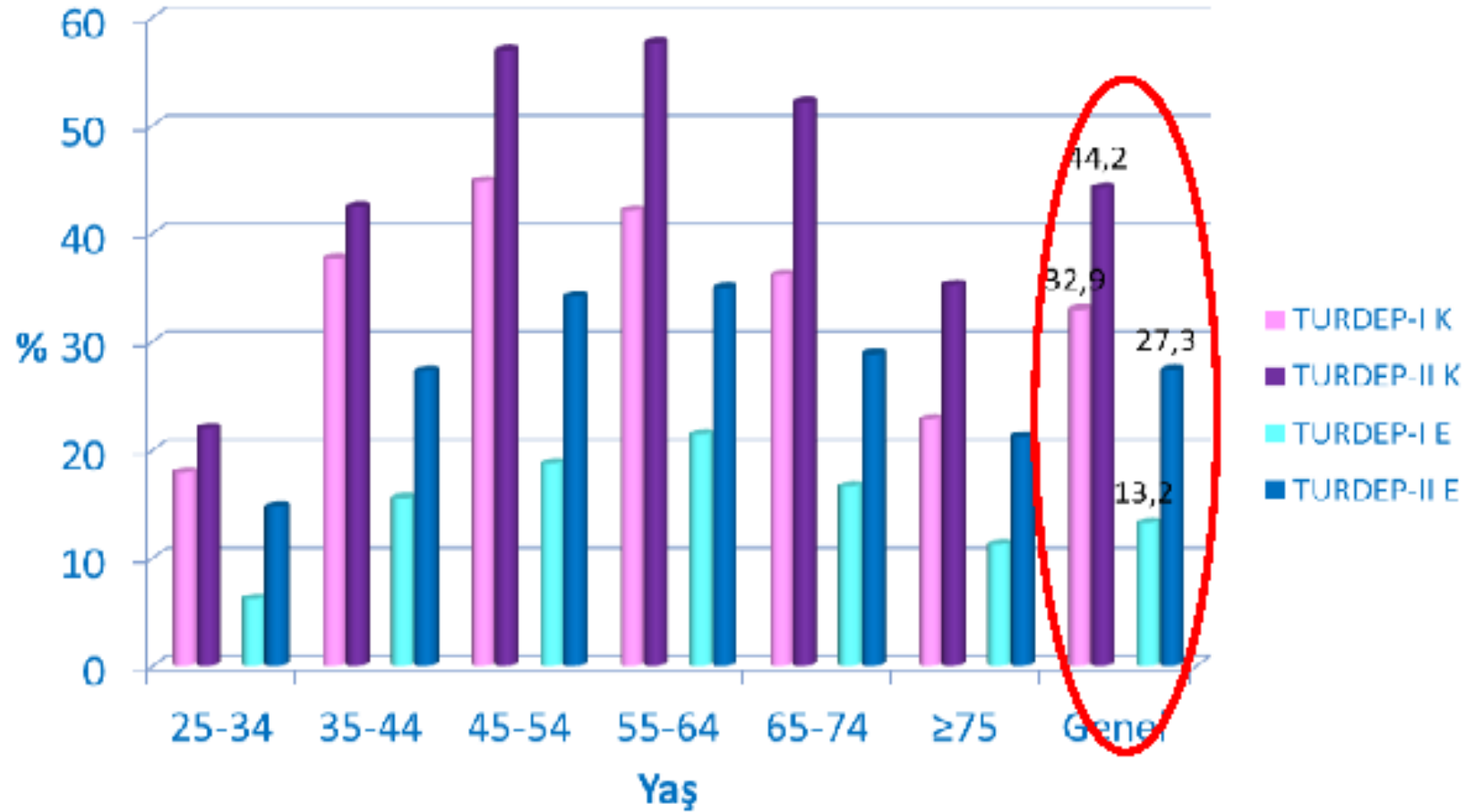
TURDEP-I (1997-98)



TURDEP-II (2010)



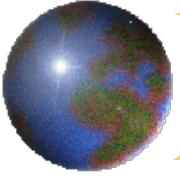
TURDEP-I'den TURDEP-II'ye Yaş grubu ve Cinsiyete göre Obezitenin Değişmesi



Türkiye'de 12 yılda obezite artışı: Kadınlarda %34, Erkeklerde %107

TUİK ADNKS-2009 Verilerine göre Türkiye'nin Diyabet, Obezite ve Hipertansiyon Nüfusu

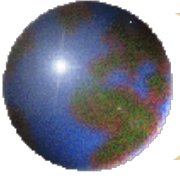
- Türkiye'de 20 yaş ve üzeri nüfus: 47.467.350 (%65.4)
- TURDEP-II'de diyabet oranı:%13.7
- Diyabetli sayısı: 6.503.027 kişi
- Bilinen diyabetli sayısı (%54.55): 3.547.401 kişi
- Yeni diyabetli sayısı (%45.45): 2.955.626 kişi
- Prediyabetik nüfus (%28.7): 13.812.899 kişi
- Obez nüfus (%31.2) : 15.237.019 kişi
- Fazla kilolu nüfus (%37.5): 17.088.246 kişi
- Hipertansiyonlu nüfus (%25.6): 12.578.848 kişi



Fiziksel aktivite kilo kontrolüne yardımcı olur!



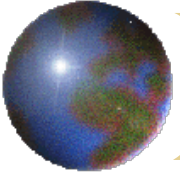
- ✦ Fazladan kalori harcanmasını sağlar.
- ✦ Metabolizma hızını artırır.
- ✦ Yağların yakılmasını ve kas kitlesinin korunmasını sağlar.



Egzersiz mental saęlıęı iyileřtirir!

- ✦ Depresyonu azaltır.
- ✦ Kaygı düzeylerini dūřürür.
- ✦ Kendine güveni artırır.

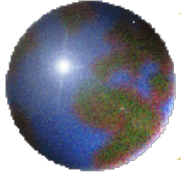




Fiziksel aktivite yařlanma srecini geciktirir!



- ✦ Zamana baęlı yařlanmanın etkilerini geciktirir.
- ✦ Yařam stilini deęiřtirerek yařlanmanın olumsuz etkilerini azaltır.



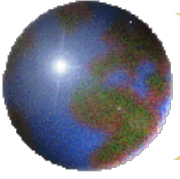
Nasıl egzersiz yapılmalı?

✦ Bir egzersiz programının içeriği

- ✦ Aerobik aktivite
- ✦ Kuvvet çalışması
- ✦ Esneklik çalışması

✦ Yüklenme prensibi

- ✦ “Fitness” düzeyini artırmak için vücuda normalden daha fazla yüklenmek gerekir.
- ✦ Bu prensip, aerobik aktivite, kuvvet ve esneklik çalışmaları için de geçerlidir.



Teşekkür ederim.