

CANINE OBESITY

Presented By
Dr. Matt Bauer DVM



A little about me



A bit about me. . . .

- Graduated Suma Cum Laude from SXU in 2005
- Graduated with high honors from University of Illinois College of Vet med in 2009
- Associate Veterinarian at LePar animal Hospital 2009
- Adjunct Faculty at SXU
- Partner at LePar Animal 2014

Rocco



Marge

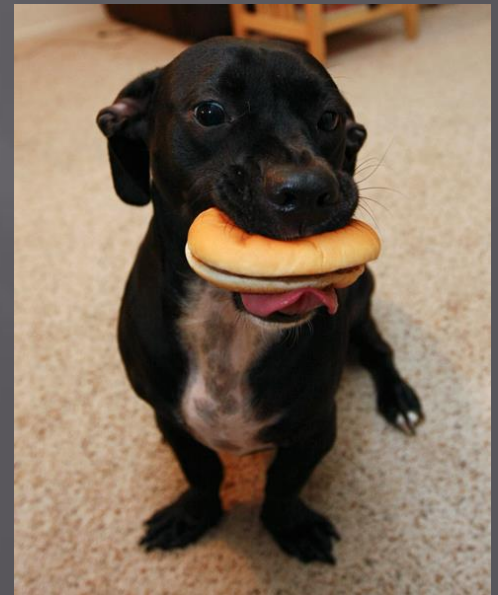


My Better Half



Why Am I Here ?

- ▣ Canine Obesity is rampant in the United States.
- ▣ It is a true epidemic affecting over half of canine companions.
- ▣ Does anyone know how prevalent obesity is in the United States?




How do we define obesity ?











- ▣ Obesity or body weight as defined by a number in pounds is profoundly misleading.
- ▣ Body condition scoring is a considerably more accurate means to define ideal body weight, vs over or under weight



Body Condition Chart



BODY CONDITION SYSTEM

TOO THIN	1	Ribs, lumbar vertebrae, pelvic bones and all bony prominences evident from a distance. No discernible body fat. Obvious loss of muscle mass.	  1
	2	Ribs, lumbar vertebrae and pelvic bones easily visible. No palpable fat. Some evidence of other bony prominence. Minimal loss of muscle mass.	
	3	Ribs easily palpated and may be visible with no palpable fat. Tops of lumbar vertebrae visible. Pelvic bones becoming prominent. Obvious waist and abdominal tuck.	  3
IDEAL	4	Ribs easily palpable, with minimal fat covering. Waist easily noted, viewed from above. Abdominal tuck evident.	
	5	Ribs palpable without excess fat covering. Waist observed behind ribs when viewed from above. Abdomen tucked up when viewed from side.	  5
TOO HEAVY	6	Ribs palpable with slight excess fat covering. Waist is discernible viewed from above but is not prominent. Abdominal tuck apparent.	
	7	Ribs palpable with difficulty; heavy fat cover. Noticeable fat deposits over lumbar area and base of tail. Waist absent or barely visible. Abdominal tuck may be present.	  7
	8	Ribs not palpable under very heavy fat cover, or palpable only with significant pressure. Heavy fat deposits over lumbar area and base of tail. Waist absent. No abdominal tuck. Obvious abdominal distention may be present.	
	9	Massive fat deposits over thorax, spine and base of tail. Waist and abdominal tuck absent. Fat deposits on neck and limbs. Obvious abdominal distention.	  9


The BODY CONDITION SYSTEM was developed at the Nestlé Purina Pet Care Center and has been validated as documented in the following publications:

Mavby D, Bariges JV, Moyers T, et al. Comparison of body fat estimates by dual-energy x-ray absorptiometry and deuterium oxide dilution in client owned dogs. *Compendium* 2001; 23 (9A): 70

Luffelme DP. Development and Validation of a Body Condition Score System for Dogs. *Canine Practice* July/August 1997; 22(10):15

Keady, et al. Effects of Diet Restriction on Life Span and Age-Related Changes in Dogs. *JAVMA* 2002; 220: 1315-1320

Call 1-800-222-VETS (8387), weekdays, 8:00 a.m. to 4:30 p.m. CT

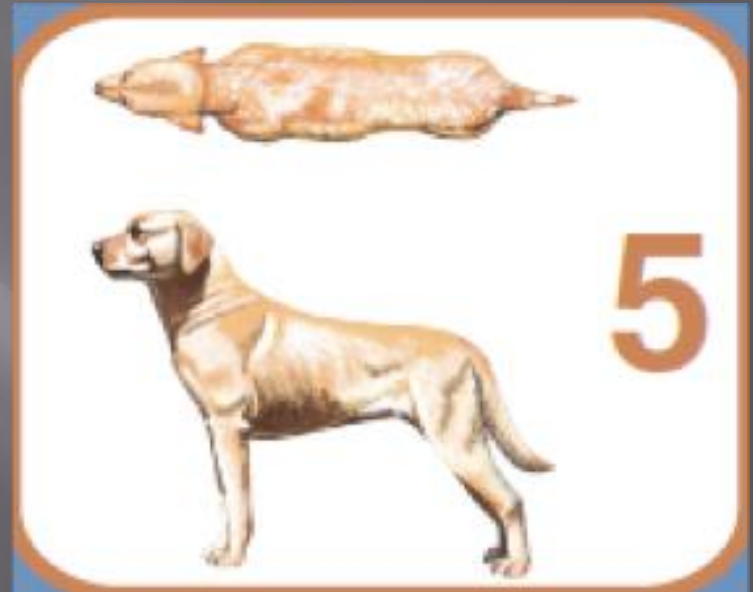


Ideal Body Condition Score (BCS)

- ▣ Ideal BCS is between a 4-5
- ▣ 4= Ribs are easily palpable, with minimal fat covering. Waist easily noted. Abdominal tuck noted.
- ▣ 5= Ribs palpable without excess fat covering. Waist observed behind ribs when viewed from above. Abdomen tucked up when viewed from the side.

Ideal BCS

- ▣ 4= Ribs are easily palpable, with minimal fat covering. Waist easily noted. Abdominal tuck noted.
- ▣ 5= Ribs palpable without excess fat covering. Waist observed behind ribs when viewed from above. Abdomen tucked up when viewed from the side.



Under Ideal BCS

- ▣ 1= Ribs, Lumbar vertebrae, pelvic bones, and all boney prominences evident from a distance. No body fat. Obvious loss of muscle
- ▣ 2= Ribs, lumbar vertebrae and pelvic bones visible. No palpable fat. Minimal loss of muscle mass
- ▣ 3= Ribs easily palpated and maybe visible with no palpable fat. Tops of vertebrae visible.

Under Ideal BCS



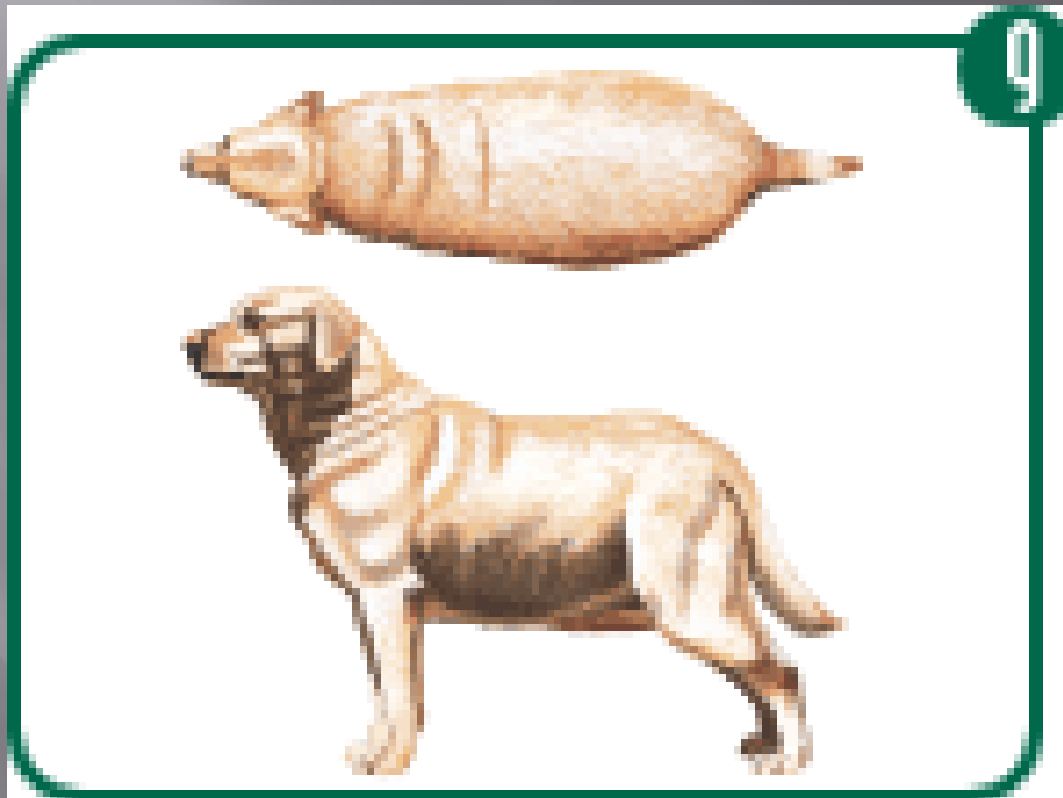
HI I'M SARAH MCLACHLAN,

AND I'M ABOUT TO RUIN YOUR DAY

Over Ideal BCS

- ▣ 6 =Ribs palpable with slight excess fat covering. Waist is discernible viewed from above but is not prominent. Abdominal tuck apparent.
- ▣ 7 =Ribs palpable with difficulty; heavy fat cover. Noticeable fat deposits over lumbar area and base of tail. Waist absent or barely visible. Abdominal tuck may be present.
- ▣ 8 =Ribs not palpable under very heavy fat cover, or palpable only with significant pressure. Heavy fat deposits over lumbar area and base of tail. Waist absent. No abdominal tuck. Obvious abdominal distension may be present.
- ▣ 9 =Massive fat deposits over thorax, spine and base of tail. Waist and abdominal tuck absent. Fat deposits on neck and limbs. Obvious abdominal distention.

Over Ideal BCS



How prevalent is this disease?

- ▣ 54% of American dogs are affected!



Why are so many pets overweight ?

- ▣ Humans are the main cause for canine obesity.



Food type, availability, and palatability



Activity level



Neutering and spaying



Genetics and breed predispositions



GENETICS

This is how it works

Age



Physical Environment



Medications



Medical Disorders Causing Obesity

- ▣ 1. Hypothyroidism
- ▣ 2. Cushing's disease
- ▣ 3. Insulinoma
- ▣ 4. Diabetes
- ▣ 5. Pituitary Brain Diseases

Medical Disease Caused by Obesity


- ▣ Joint damage
- ▣ Diabetes
- ▣ Heart Disease and hypertension
- ▣ Difficulty breathing
- ▣ Decreased stamina
- ▣ Heat intolerance
- ▣ Liver dysfunction
- ▣ Reproductive problems
- ▣ Decreased Immune function
- ▣ Skin and Hair coat problems
- ▣ Digestive disorders
- ▣ Increased risk of Cancer
- ▣ Decreased life span

Joint Damage

AIS Image Viewer - Google Chrome
<https://aisv1.antechimaging.com/AisViewer/ImageViewer?studyUids=1.2.840.114387.208733569.16430.19908.41541.15848471.11753116&userId=54367335466f49466e73733d>

Manufacturer: Sound Technologies, Inc.
Model Name: TRUDR PLUS 4030
Accn. Num:
StudyID:
Series Descr.:
Series Num: 1
Acq. Num: 4
Study Date: 03/24/2014
Series Time: 16:45:37
Acquisition Time: 16:51:25

Inst. Name: LePar Animal Hospital
Pat. Name: KINCAID, COSMO
Pat. ID: 7995COSMO
Rsp. Person: KINCAID~
Species: CANINE
Breed: UNKNOWN
Birth Date: 07/13/2001
Sex:
PatientSex/Neutered: UNALTERED



WW/WL: 4095/2047

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1/1/2015

Diabetes



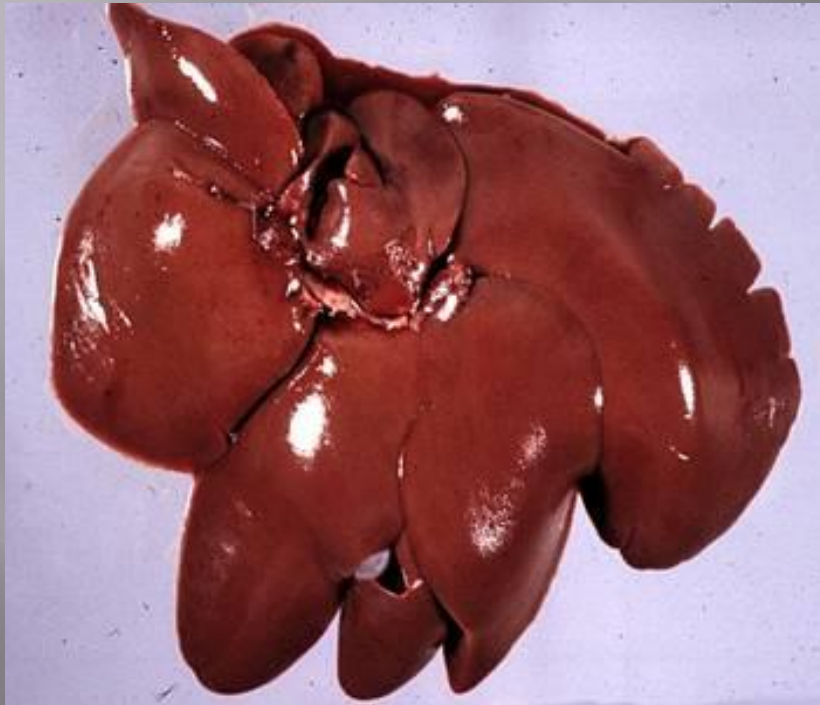
Heart Disease



Difficulty Breathing



Liver Dysfunction



Increased Anesthetic Risk



Digestive Disorders



Skin and hair coat problems



Increased Risk of Cancer



Decreased Quality of Life

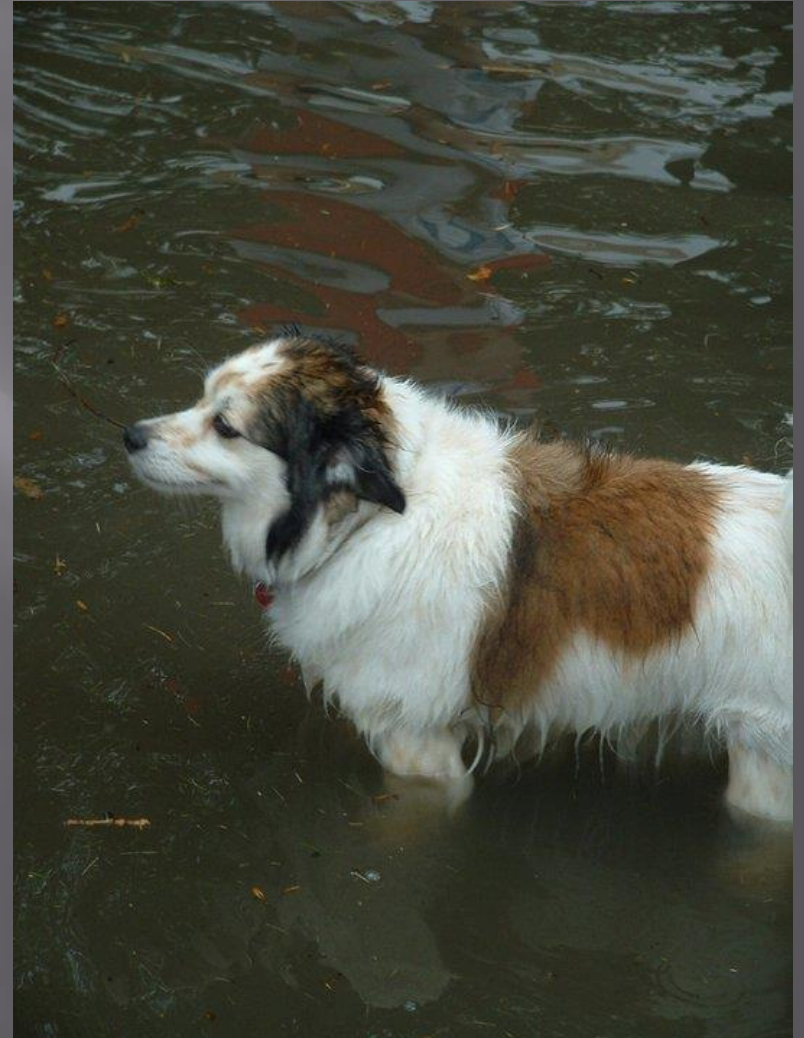


Real Cases



Sneakers

- ▣ 11 YO MN Mix Breed Dog
- ▣ BCS 8/9
- ▣ 35#



Presenting Complaint

- ▣ Sneakers has been drinking more and urinating more for the past 3 weeks
- ▣ His appetite is increased but he has lost quite a bit of weight lately.
- ▣ His overall activity is a bit reduced, but still playful.

Physical Exam

- ▣ TPR normal
- ▣ Moderate dental disease
- ▣ Sneakers has lost over ten pounds since his last physical
- ▣ He appears dehydrated on physical examination
- ▣

Next step ?

- ▣ Chemistry Panel/ CBC / Urine sample
- ▣ Results
- ▣ Blood glucose > 600 mg/dl
- ▣ ALP (liver value) 519 (5-131)
- ▣ Large amount of glucose in urine
- ▣ Trace Ketones

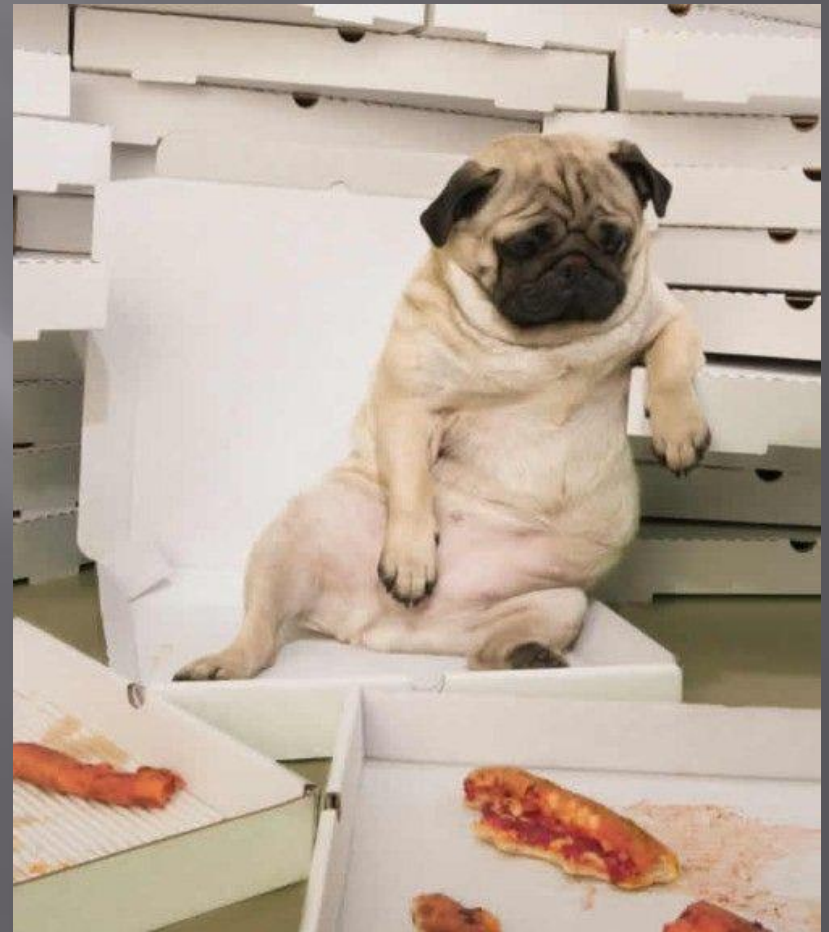
Treatment Plan

- ❑ Sneakers now requires Insulin for the remainder of his life.
- ❑ With treatment he will maintain a good quality of life, but diabetes will shorten his life span in the long run.



The Dude

- ▣ 10 YO MN pug
- ▣ 44#
- ▣ BCS 9/9



Presenting Complaint

- ▣ “The Dude “ has been lethargic and more “grumpy at home
- ▣ He no longer wants to go upstairs
- ▣ He cannot jump in the owner’s car any longer
- ▣ Recently The Dude has started limping on his left front leg

Physical Exam

- ▣ Dude is Morbidly obese
- ▣ BCS 9/9 @ 45#
- ▣ On palpation of the left forelimb The Dude attempted to bite me, he was very painful.
- ▣ He had a profound lameness of his left forelimb, and a slight limp of his right forelimb.
- ▣ Dude was most sensitive around the elbow


What do we do next?

▣ Radiographs

AIS Image Viewer - Google Chrome
<https://aisv1.antechimaging.com/AisViewer/ImageViewer?studyUids=1.2.840.114387.208733569.16430.19908.41541.15848471.11753116&userId=54367335466f49466e73733d>

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Inst. Name: LePar Animal Hospital
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Resp. Person: KINCAID*
Species: CANINE
Breed: UNKNOWN
Birth Date: 07/13/2001
Sex:
PatientSexNeutered: UNALTERED



WW/WL: 4095/2047

11:29 AM
1/1/2015

Diagnosis and Treatment

- ▣ Dude has severe DJD / arthritis of both elbows
- ▣ Treatment will include
 - Weight loss !
 - Glucosamine / Chondroitin
 - Fish and Krill Oil
 - Physical Therapy
 - Prescription Anti-inflammatory Drugs

How do we prevent obesity?

- ▣ Provide exercise
- ▣ Choose the correct type and amount of food
- ▣ Regularly monitor the dog's weight
- ▣ Regulate the weight of young dogs
- ▣ Limit or eliminate treats and table scraps
- ▣ Treat any contributing factors or diseases

My pet is obese, now what?



In Summary

- ▣ Canine Obesity is a nationwide epidemic
- ▣ While there are many contributing factors, human owners are responsible for our pets
- ▣ By working together with your Veterinarian you can help with this epidemic

Questions?

