

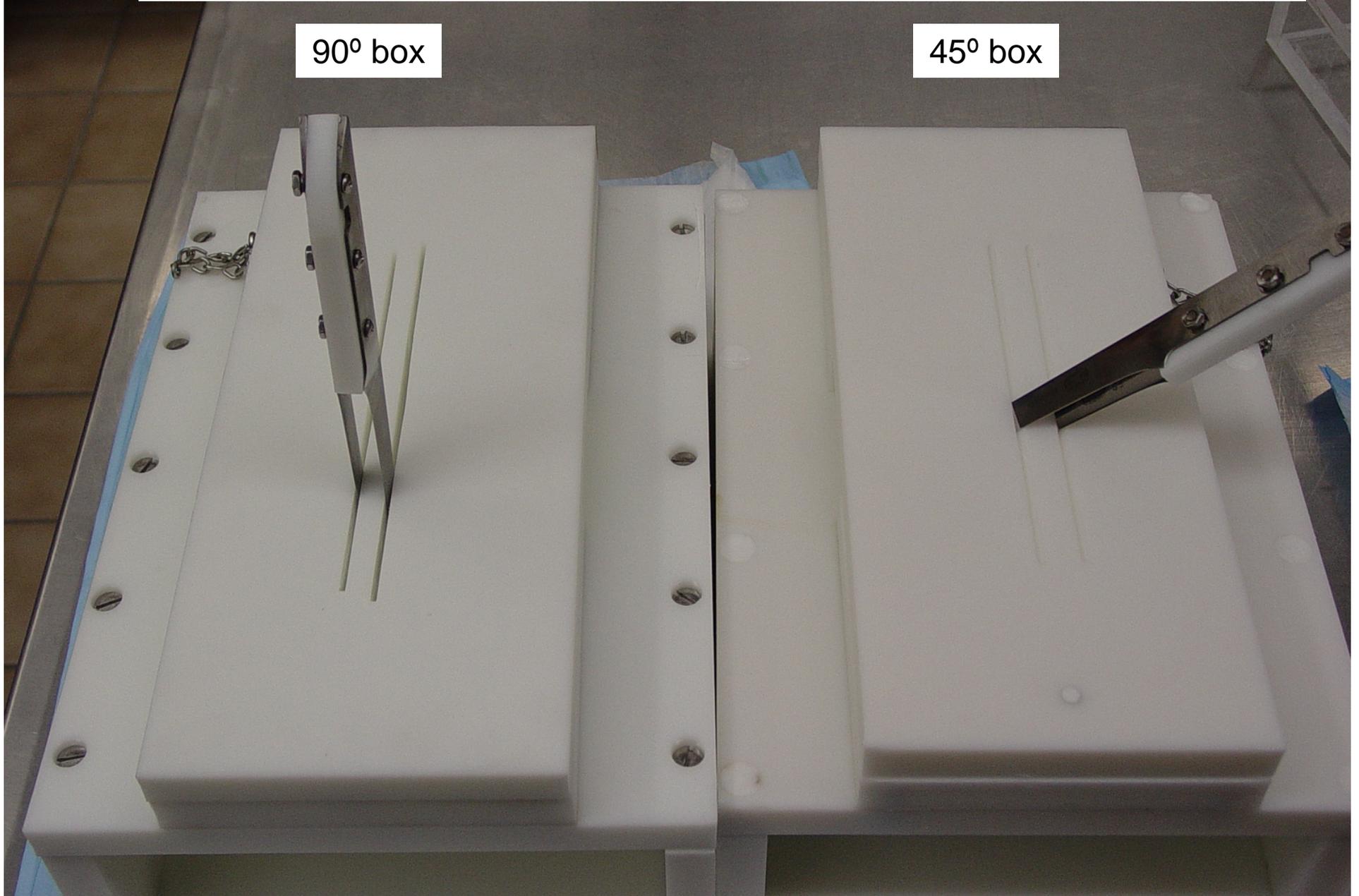
USMARC Slice Shear Force  
Procedure for Beef  
Biceps femoris long head (BF)

- This project was funded, in part, by The Beef Checkoff.

SSF sampling of BF is conducted with the 45° box

90° box

45° box

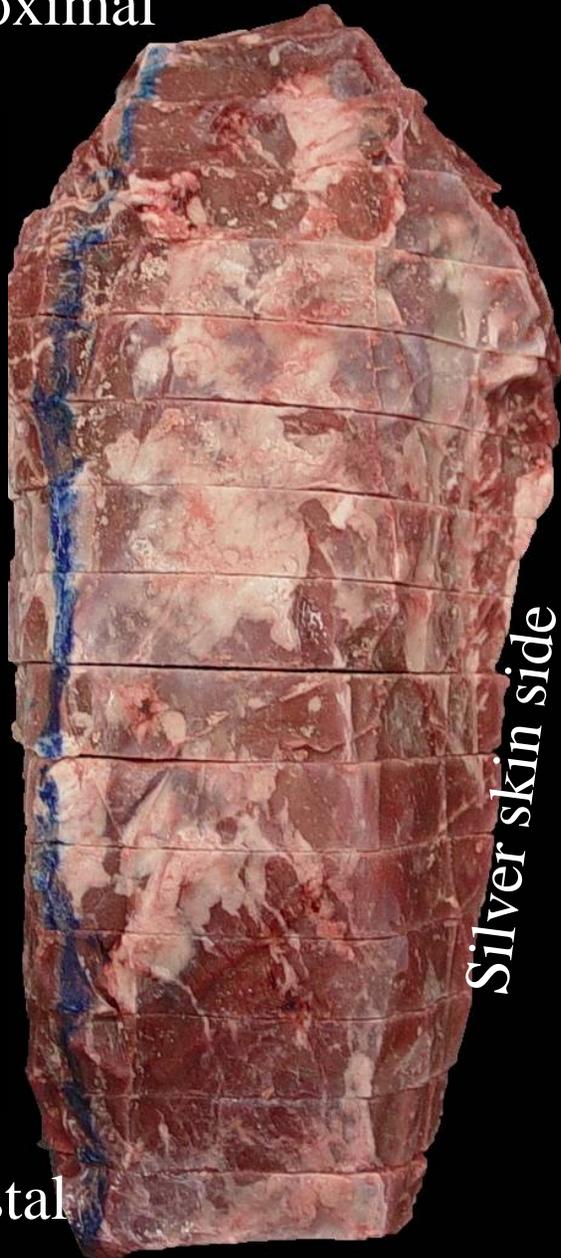


On the following slides, a picture of a frozen steak is shown rather than a cooked steak. This was done in order to more clearly show steak orientation. But, slice shear force measurement is conducted on cooked steaks. Steaks are sampled and slice shear force is measured immediately after completion of cooking.

# Biceps femoris – Left

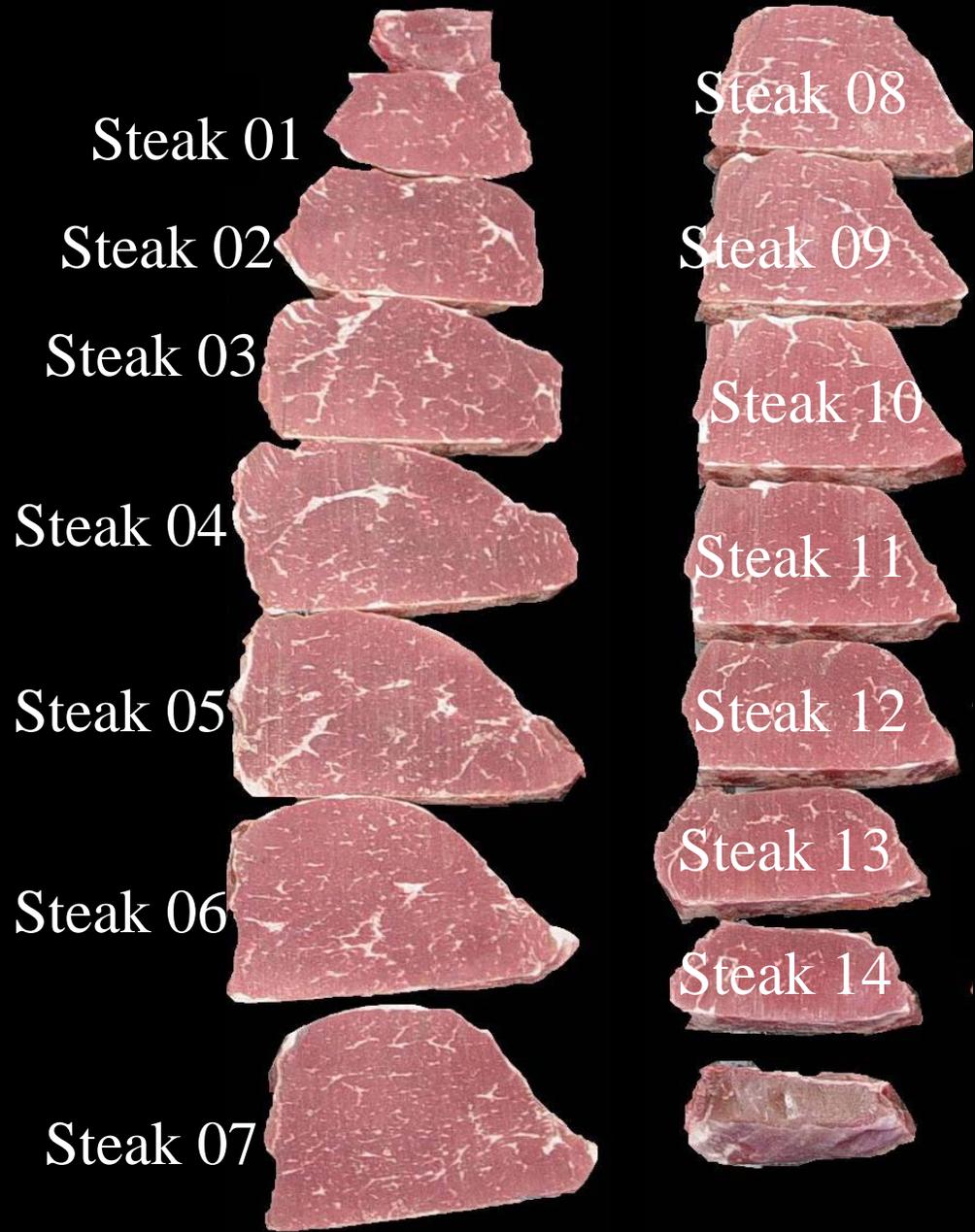
Proximal

BF  
Left  
Steak 1  
Steak 2  
Steak 3  
.  
.  
.  
.  
.  
.  
.  
.  
.  
.  
Steak n



Silver skin side

Distal



Steak 01

Steak 02

Steak 03

Steak 04

Steak 05

Steak 06

Steak 07

Steak 08

Steak 09

Steak 10

Steak 11

Steak 12

Steak 13

Steak 14

# Biceps femoris – Right

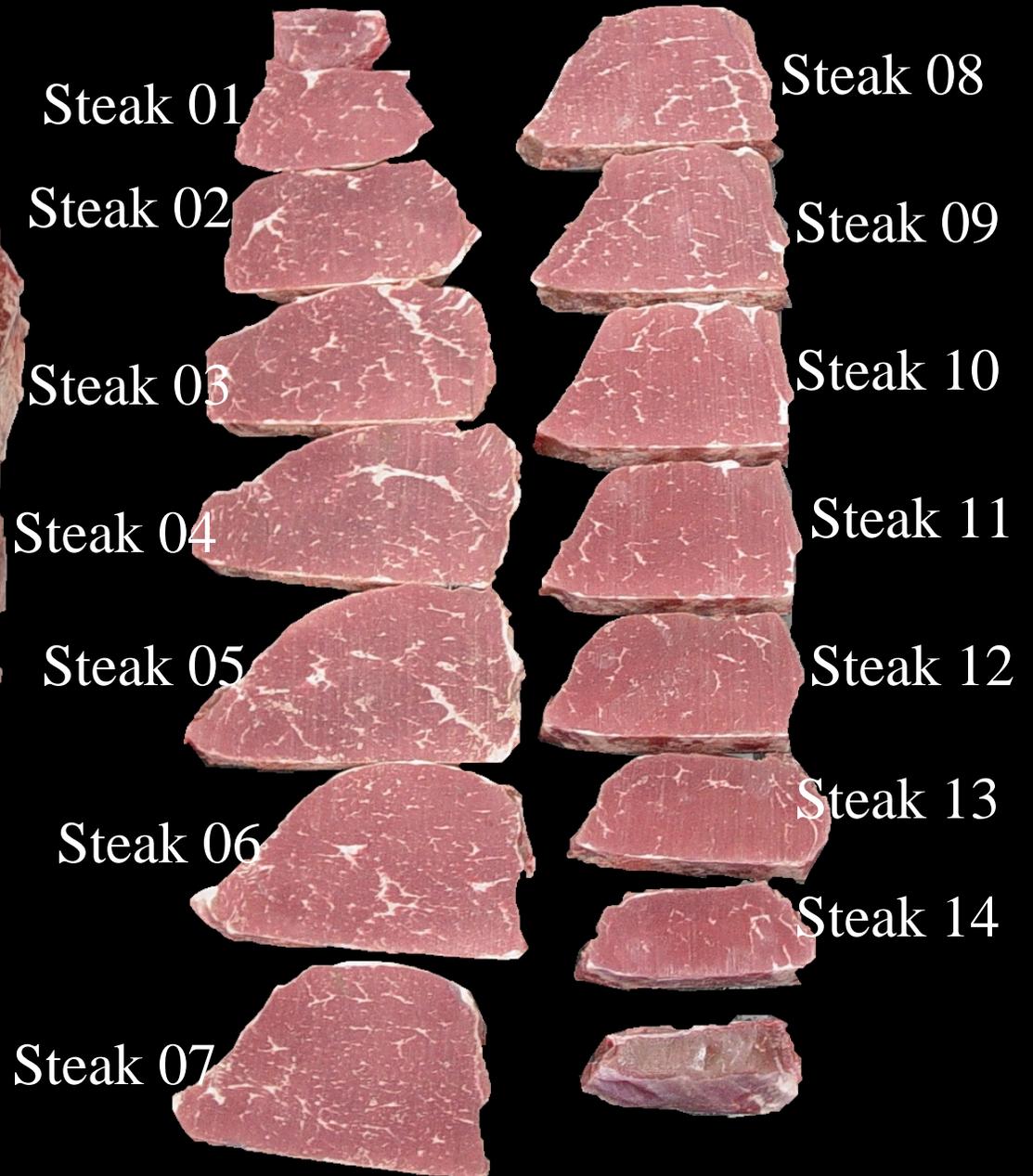
Proximal

BF  
Right  
Steak 1  
Steak 2  
Steak 3

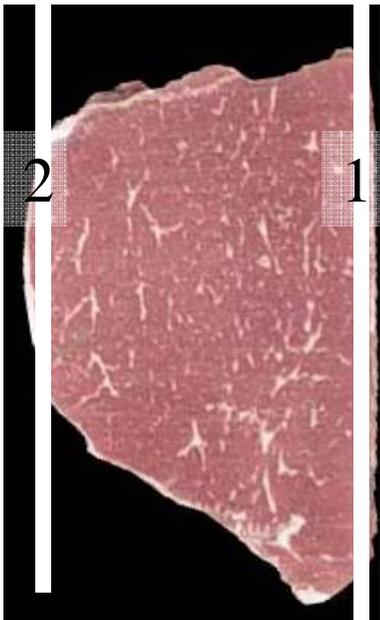
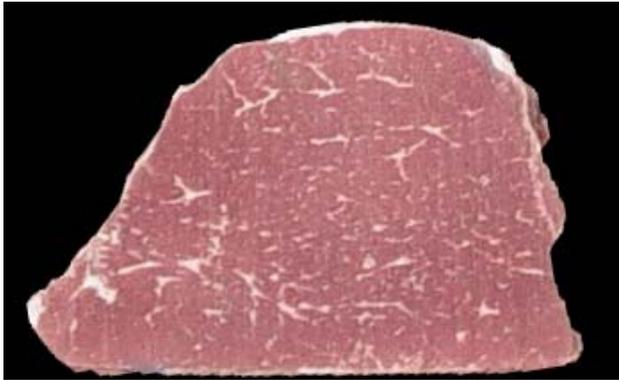
Silver skin side

Steak n

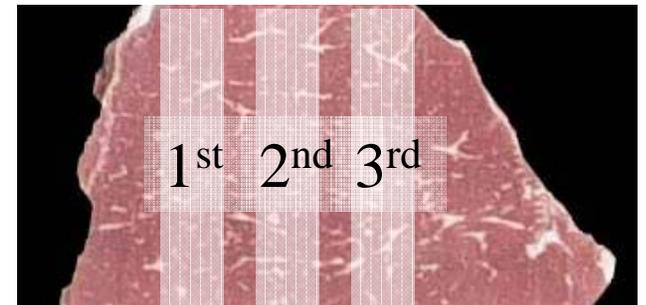
Distal



# Biceps femoris LEFT

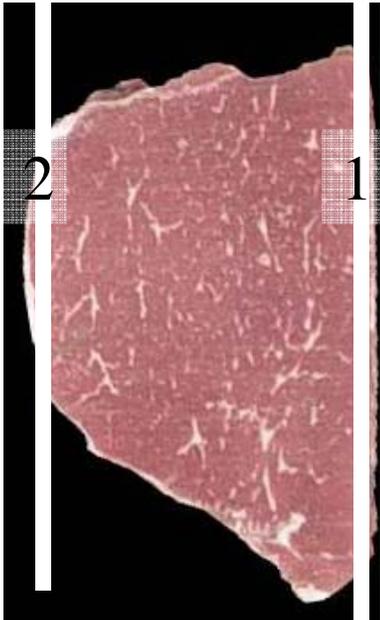
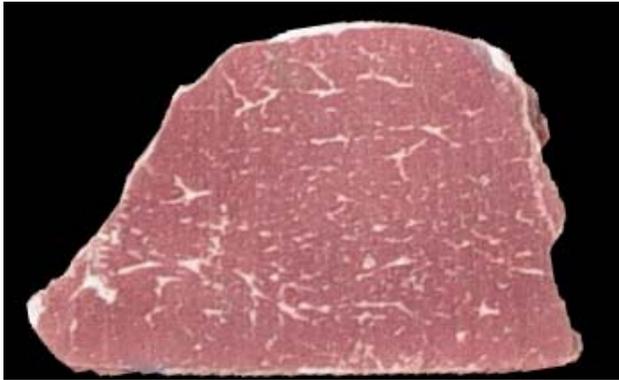


Flip  
it  
over

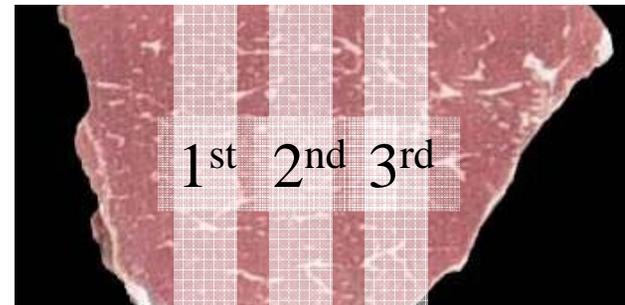


Orient the steak with the blue mark at the top right. Rotate the steak **counter clockwise** and make cut 1. Place in 5 cm box and make cut 2. Rotate the piece **counter clockwise** and then **flip it over** and place it in the 45 degree box. Obtain the 1<sup>st</sup> slice near the right side (now on the left) of the section. Obtain the 2<sup>nd</sup> slice near the center. Obtain the 3<sup>rd</sup> slice near the left (now on the right). Space the slices approximately equally.

# Biceps femoris RIGHT



Orient the steak with the blue mark at the top right. Rotate the steak **counter clockwise** and make cut 1. Place in 5 cm box and make cut 2. Rotate the piece **counter clockwise** and place in the 45 degree box. Obtain the 1<sup>st</sup> slice near the right side (now on the left) of the section. Obtain the 2<sup>nd</sup> slice near the center. Obtain the 3<sup>rd</sup> slice near the left (now on the right). Space the slices approximately equally.



# Sample data sheet for BF SSF

Fresh\_SSF\_Data

Date	Yellow tag ID	Muscle	Location	Slice box	SSF	Notes	DPM
07/01/2009	2001	02_BF	021_Right	45°			15
07/01/2009	2001	02_BF	022_Center	45°			15
07/01/2009	2001	02_BF	023_Left	45°			15
07/01/2009	2002	02_BF	021_Right	45°			15
07/01/2009	2002	02_BF	022_Center	45°			15
07/01/2009	2002	02_BF	023_Left	45°			15
07/01/2009	2003	02_BF	021_Right	45°			15
07/01/2009	2003	02_BF	022_Center	45°			15
07/01/2009	2003	02_BF	023_Left	45°			15
07/01/2009	2004	02_BF	021_Right	45°			15
07/01/2009	2004	02_BF	022_Center	45°			15
07/01/2009	2004	02_BF	023_Left	45°			15
07/01/2009	2005	02_BF	021_Right	45°			15
07/01/2009	2005	02_BF	022_Center	45°			15
07/01/2009	2005	02_BF	023_Left	45°			15
07/01/2009	2006	02_BF	021_Right	45°			15
07/01/2009	2006	02_BF	022_Center	45°			15
07/01/2009	2006	02_BF	023_Left	45°			15
07/01/2009	2007	02_BF	021_Right	45°			15
07/01/2009	2007	02_BF	022_Center	45°			15
07/01/2009	2007	02_BF	023_Left	45°			15
07/01/2009	2008	02_BF	021_Right	45°			15
07/01/2009	2008	02_BF	022_Center	45°			15
07/01/2009	2008	02_BF	023_Left	45°			15
07/01/2009	2009	02_BF	021_Right	45°			15
07/01/2009	2009	02_BF	022_Center	45°			15
07/01/2009	2009	02_BF	023_Left	45°			15
07/01/2009	2010	02_BF	021_Right	45°			15
07/01/2009	2010	02_BF	022_Center	45°			15
07/01/2009	2010	02_BF	023_Left	45°			15