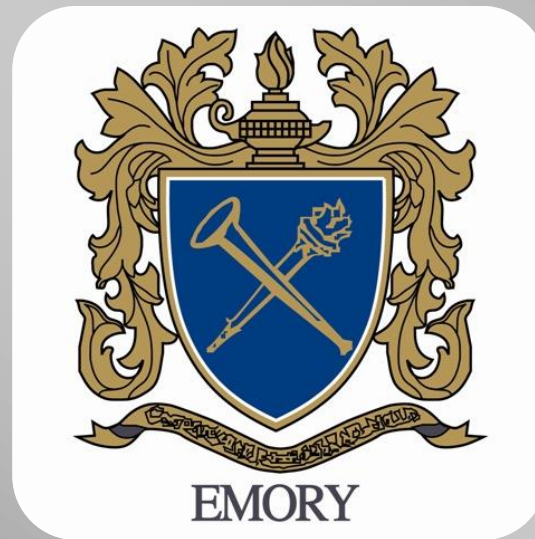
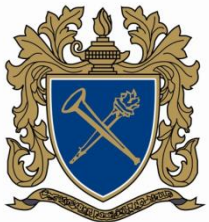


Living a Healthy, Active Life with a Diagnosis of Atrial Fibrillation.



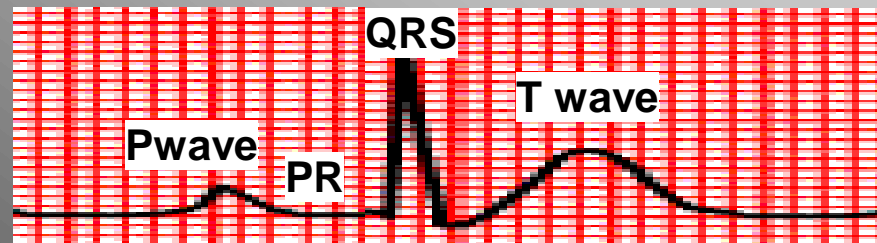
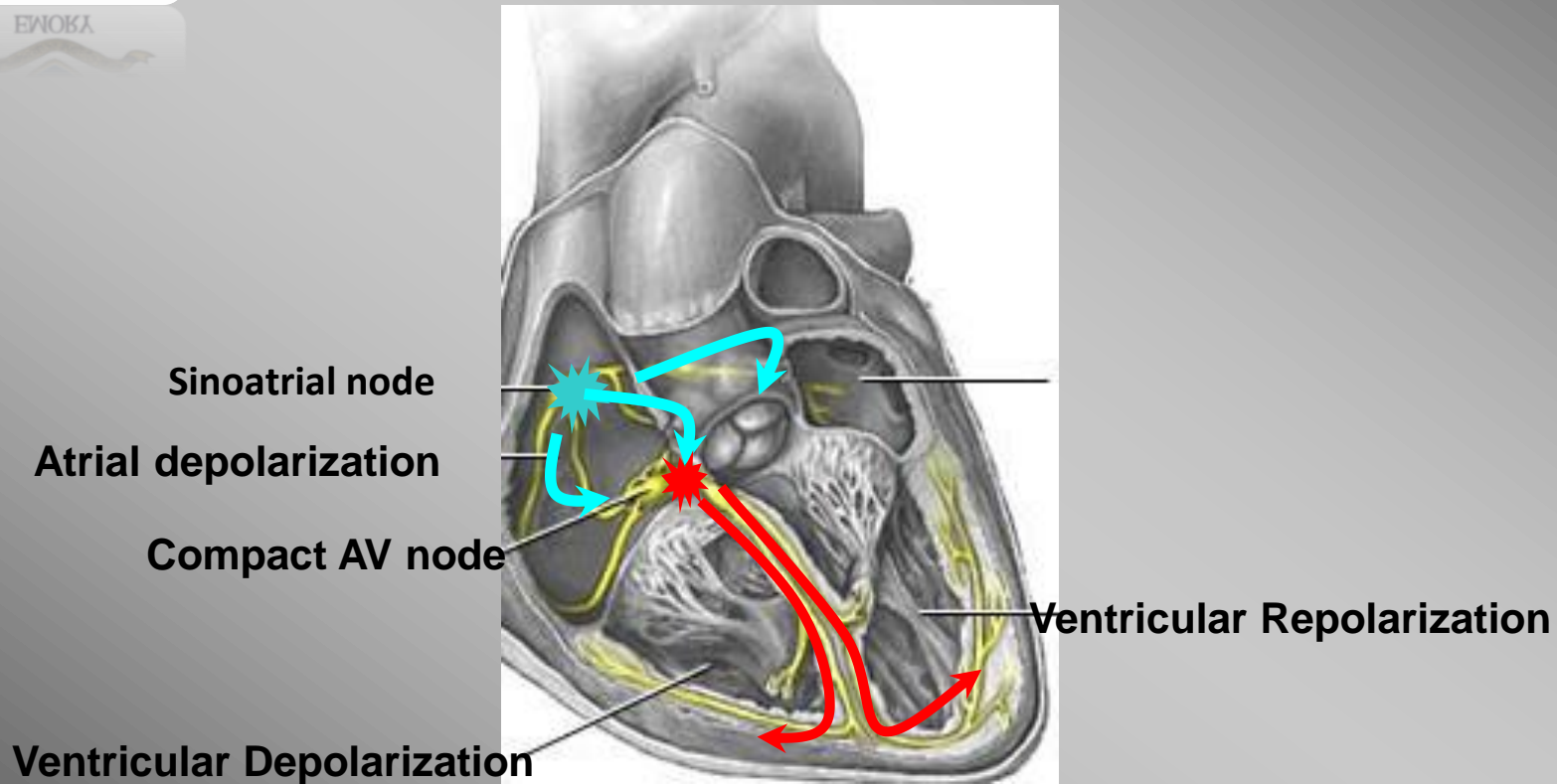
Michael S. Lloyd MD FACC FHRS
Associate Professor
Emory University Hospital
mlloyd2@emory.edu

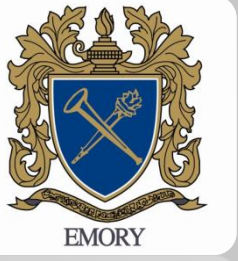


EMORY

EMORY

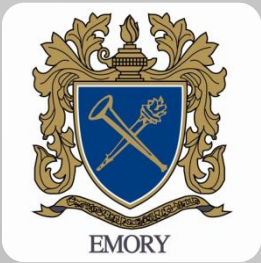
What exactly is Afib?



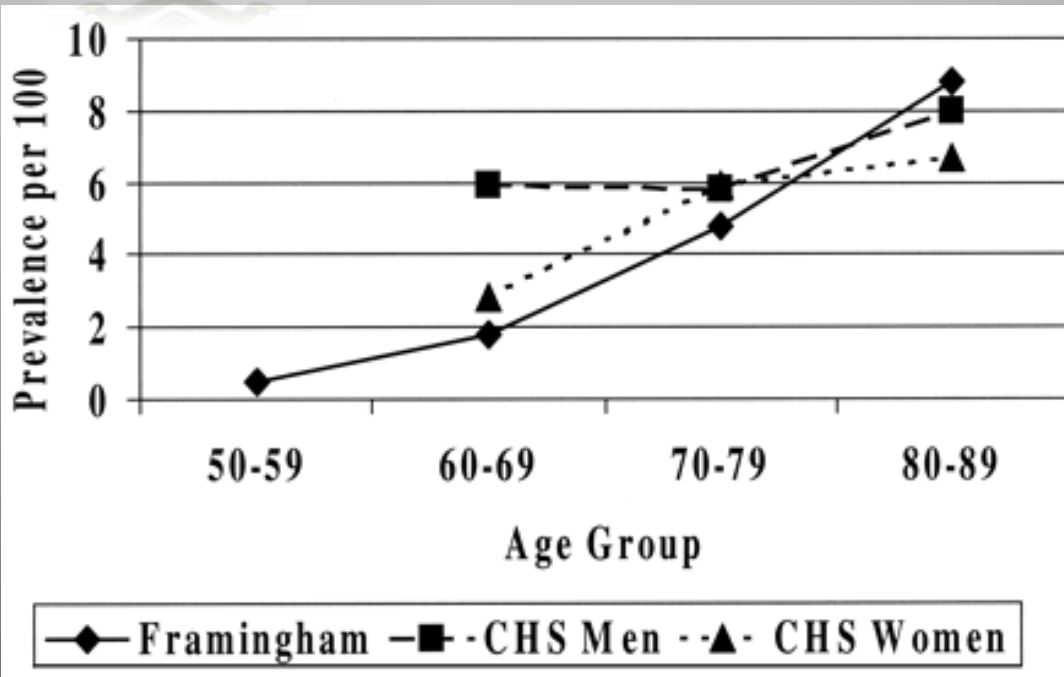


What exactly is Afib?

<http://www.blaufuss.org/SVT/index2.html>



Why Me?



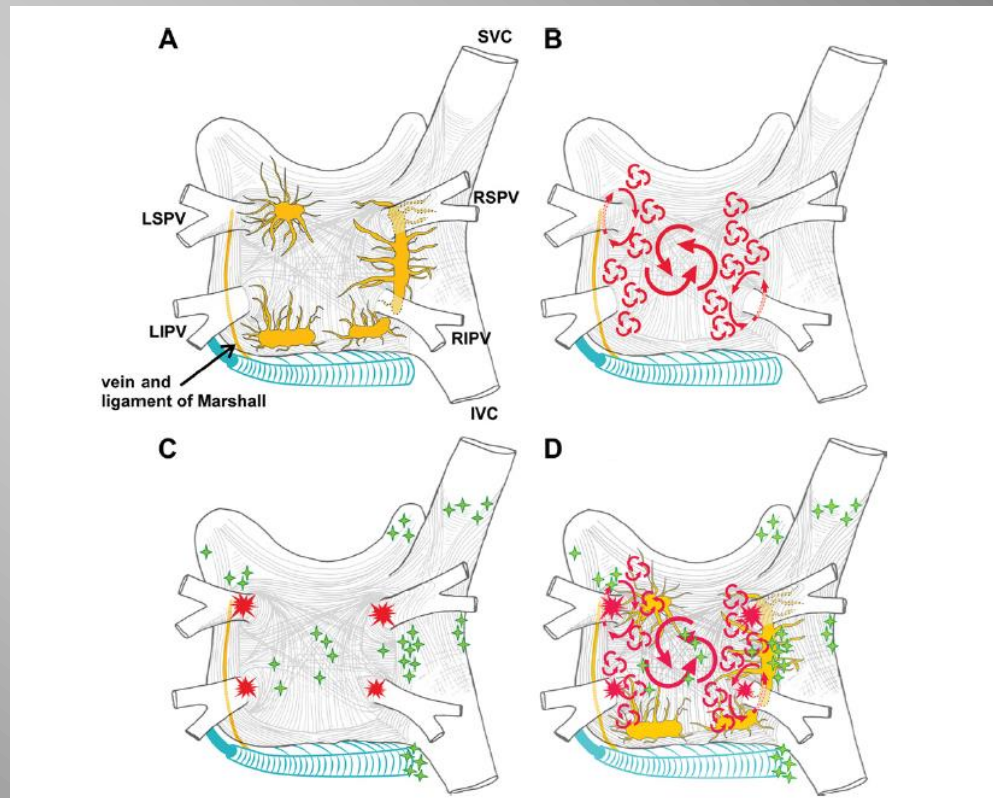
Risk factors for developing AF

- Age over 60
- Alcohol
- Weight
- Family history
- Sleep apnea
- Diabetes
- High Blood Pressure
- Valve problems
- Lung Disease
- **Long distance running

THERE ARE MANY TYPES OF ATRIAL FIBRILLATION!



Lone atrial fibrillation, afib with no other known heart problems.



THERE ARE MANY TYPES OF ATRIAL FIBRILLATION!



Paroxysmal, starting and stopping



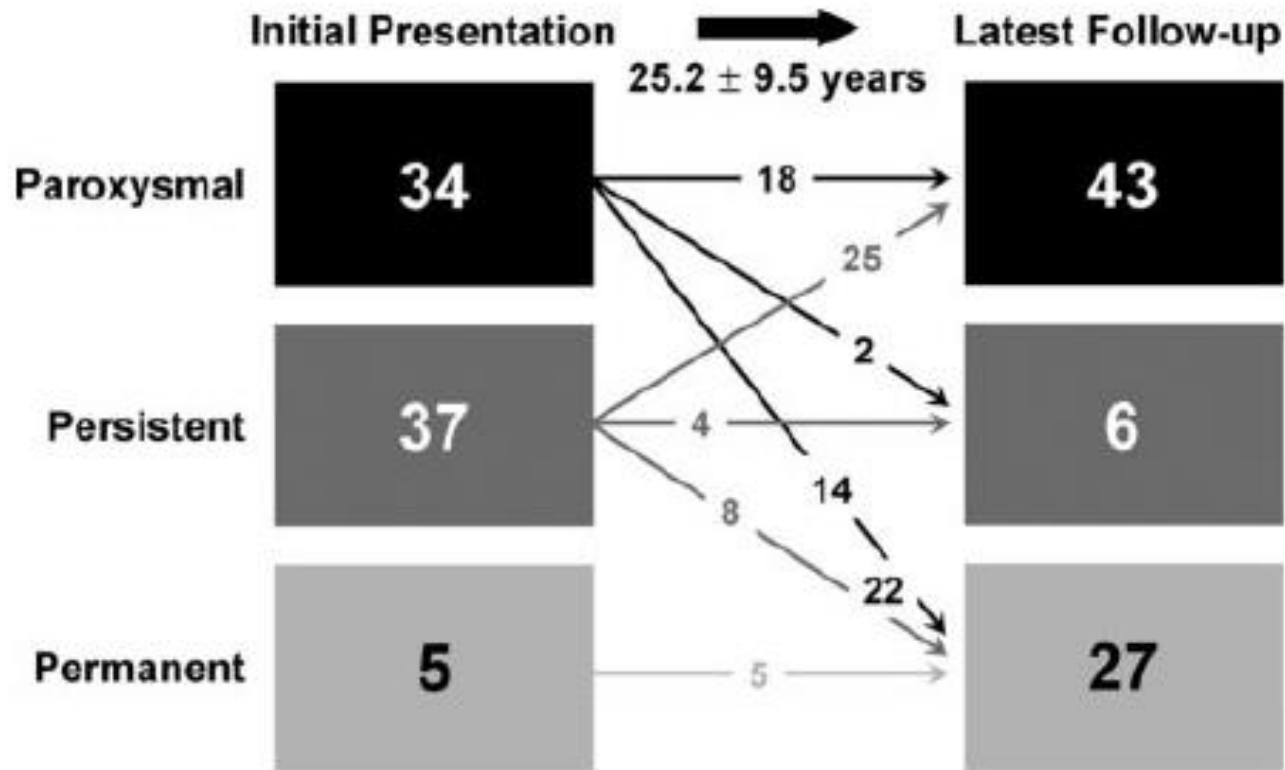
Persistent, requiring intervention



Permanent, staying there



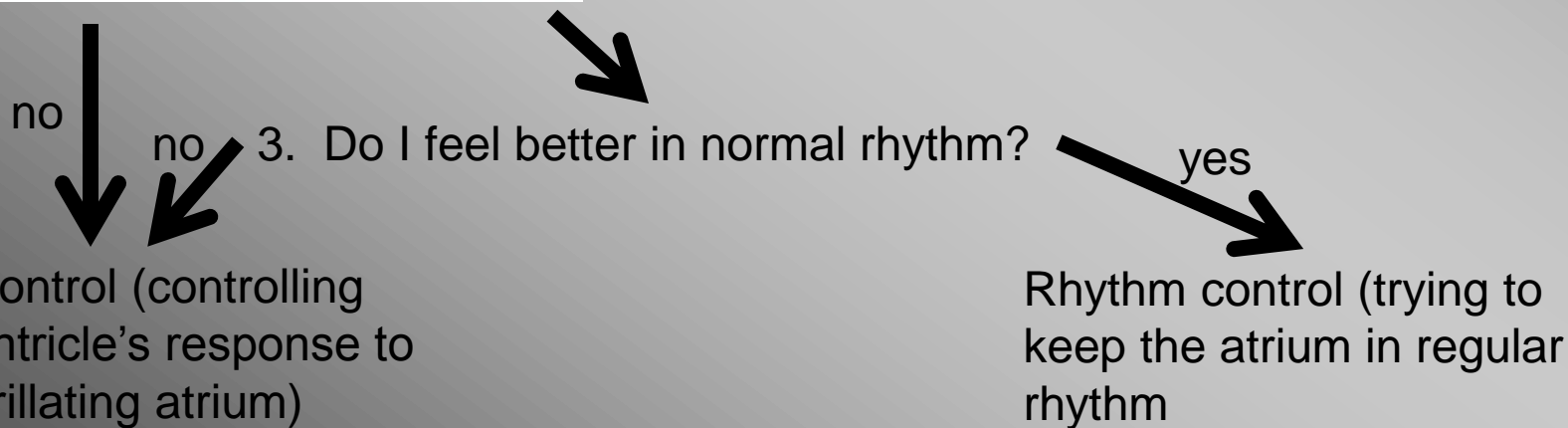
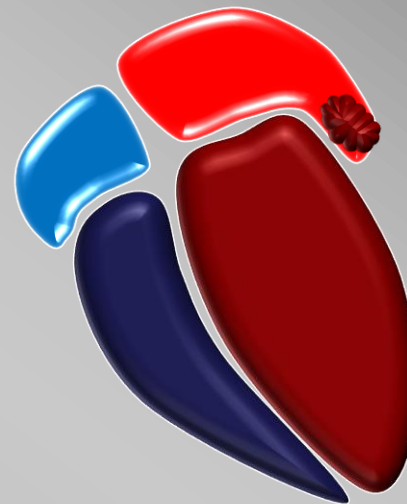
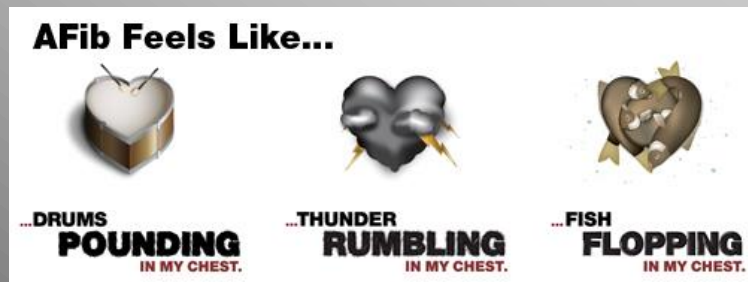
What Does That Mean for My Life?



A Stepwise Approach to Living With Atrial Fibrillation

1. What's my risk for stroke?

2. Do I have symptoms?



What can your doctor do?

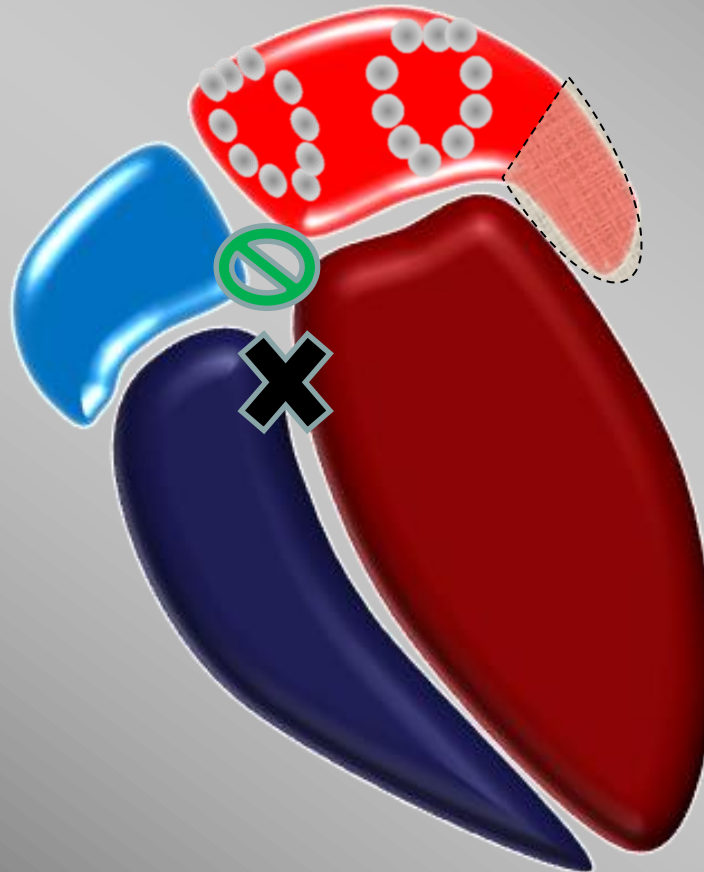


ablation

medications

pacemakers

other devices



What Can I Do To Live Healthy With Afib?

1. Weight



2. Diet/Exercise



3. Sleep



4. Education



Weight and Afib, What's the Big Deal?



Increases chance of diabetes

Increases chance of high blood pressure

Increases chance of sleep apnea

Weight and Afib, What's the Big Deal?

Height in Feet and Inches

Weight in Pounds

	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250
4'	30.5	33.6	36.6	39.7	42.7	45.8	48.8	51.9	54.9	58.0	61.0	64.1	67.1	70.2	73.2	76.3
4' 2"	28.1	30.9	33.7	36.6	39.4	42.2	45.0	47.8	50.6	53.4	56.2	59.1	61.9	64.7	67.5	70.3
4' 4"	26.0	28.6	31.2	33.8	36.4	39.0	41.6	44.2	46.8	49.4	52.0	54.6	57.2	59.8	62.4	65.0
4' 6"	24.1	26.5	28.9	31.3	33.8	36.2	38.6	41.0	43.4	45.8	48.2	50.6	53.0	55.4	57.9	60.3
4' 8"	22.4	24.7	26.9	29.1	31.4	33.6	35.9	38.1	40.4	42.6	44.8	47.1	49.3	51.6	53.8	56.0
4' 10"	20.9	23.0	25.1	27.2	29.3	31.3	33.4	35.5	37.6	39.7	41.8	43.9	46.0	48.1	50.2	52.2
5'	19.5	21.5	23.4	25.4	27.3	29.3	31.2	33.2	35.2	37.1	39.1	41.0	43.0	44.9	46.9	48.8
5' 2"	18.3	20.1	21.9	23.8	25.6	27.4	29.3	31.1	32.9	34.7	36.6	38.4	40.2	42.1	43.9	45.7
5' 4"	17.2	18.9	20.6	22.3	24.0	25.7	27.5	29.2	30.9	32.6	34.3	36.0	37.8	39.5	41.2	42.9
5' 6"	16.1	17.8	19.4	21.0	22.6	24.2	25.8	27.4	29.0	30.7	32.3	33.9	35.5	37.1	38.7	40.3
5' 8"	15.2	16.7	18.2	19.8	21.3	22.8	24.3	25.8	27.4	28.9	30.4	31.9	33.4	35.0	36.5	38.0
5' 10"	14.3	15.8	17.2	18.7	20.1	21.5	23.0	24.4	25.8	27.3	28.7	30.1	31.6	33.0	34.4	35.9
6'	13.6	14.9	16.3	17.6	19.0	20.3	21.7	23.1	24.4	25.8	27.1	28.5	29.8	31.2	32.5	33.9
6' 2"	12.8	14.1	15.4	16.7	18.0	19.3	20.5	21.8	23.1	24.4	25.7	27.0	28.2	29.5	30.8	32.1
6' 4"	12.2	13.4	14.6	15.8	17.0	18.3	19.5	20.7	21.9	23.1	24.3	25.6	26.8	28.0	29.2	30.4
6' 6"	11.6	12.7	13.9	15.0	16.2	17.3	18.5	19.6	20.8	22.0	23.1	24.3	25.4	26.6	27.7	28.9
6' 8"	11.0	12.1	13.2	14.3	15.4	16.5	17.6	18.7	19.8	20.9	22.0	23.1	24.2	25.3	26.4	27.5
6' 10"	10.5	11.5	12.5	13.6	14.6	15.7	16.7	17.8	18.8	19.9	20.9	22.0	23.0	24.0	25.1	26.1
7'	10.0	11.0	12.0	13.0	13.9	14.9	15.9	16.9	17.9	18.9	19.9	20.9	21.9	22.9	23.9	24.9

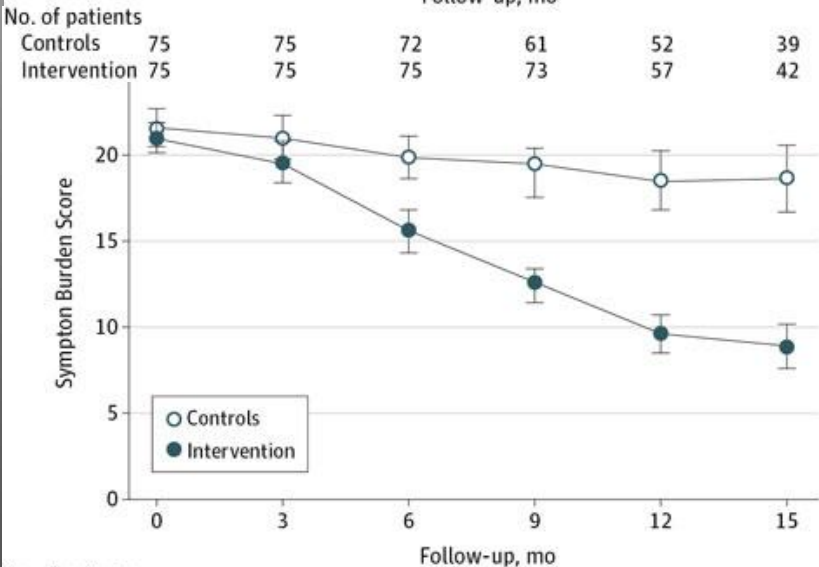
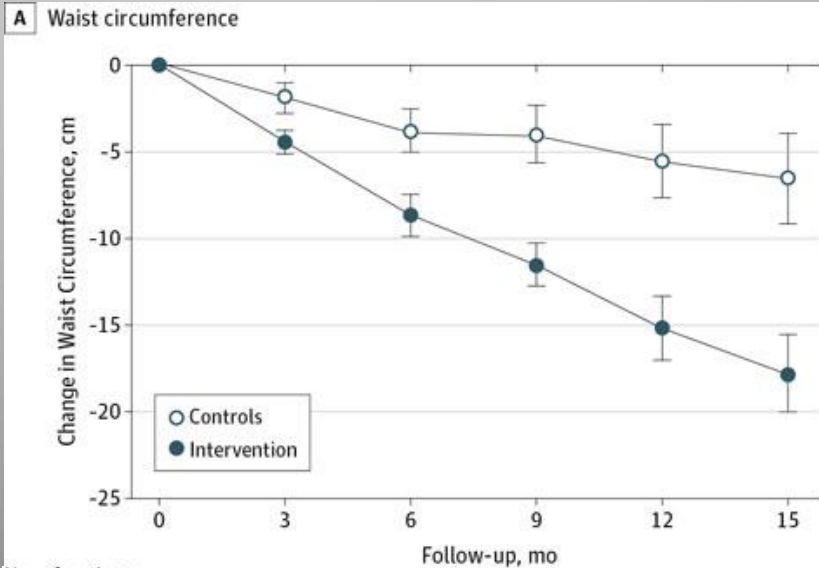
<http://www.freebmi-calculator.net>

Underweight
 Normal
 Overweight
 Obesity

BMI Chart

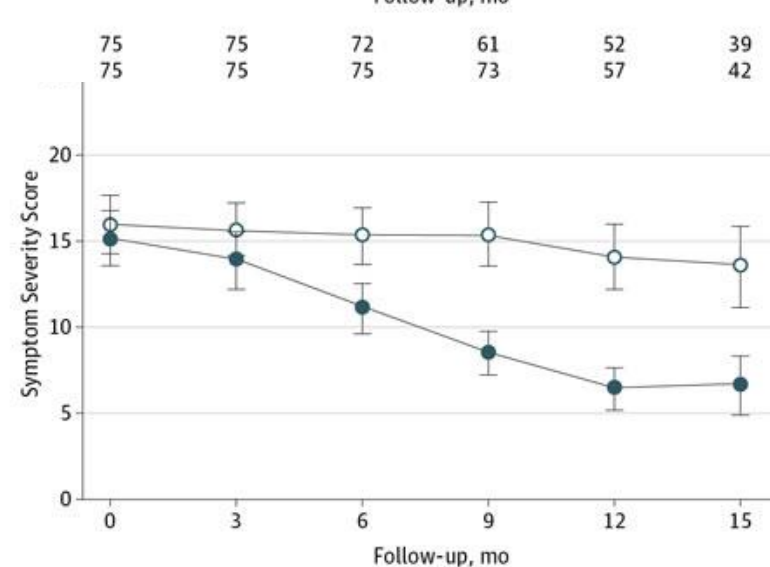
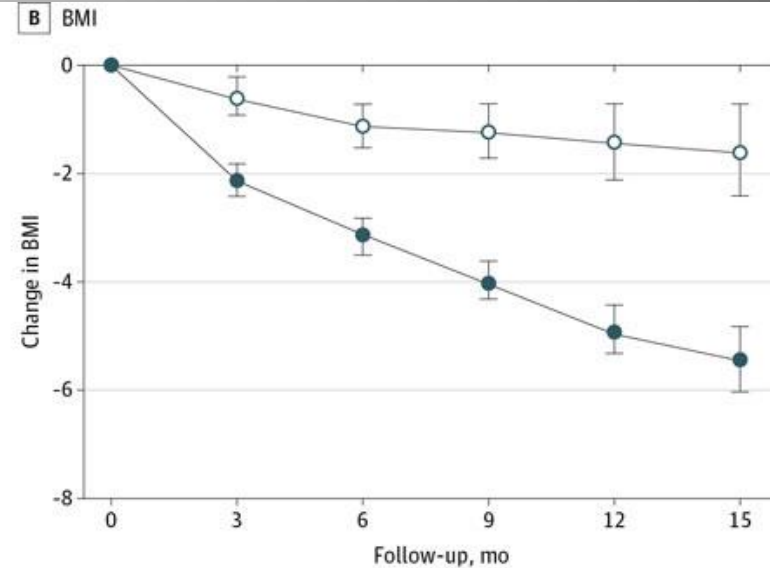
BMI < 18.50	Underweight
BMI < 16.00	Severe Thinness
BMI 16.00 - 16.99	Moderate Thinness
BMI 17.00 - 18.49	Mild Thinness
BMI 18.50 - 24.99	Normal Weight
BMI 18.50 - 22.99	Lower Range
BMI 23.00 - 24.99	Upper Range
BMI 25.00 - 29.99	Overweight / Pre-Obese
BMI 25.00 - 27.49	Lower Range
BMI 27.50 - 29.99	Upper Range
BMI ≥ 30	Obese
BMI 30.00 - 34.99	Obese Class I
BMI 35.00 - 39.99	Obese Class II
BMI ≥ 40.00	Obese Class III

Losing Weight Helps Afib



No. of patients

	0	3	6	9	12	15
Controls	75	75	72	61	52	39
Intervention	75	75	75	73	57	42



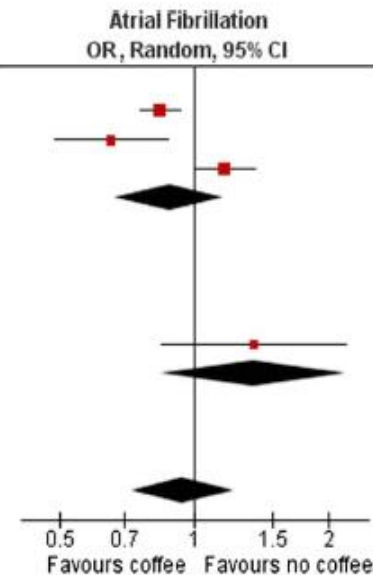
No. of patients

	0	3	6	9	12	15
Controls	75	75	72	61	52	39
Intervention	75	75	75	73	57	42



Diet and Afib

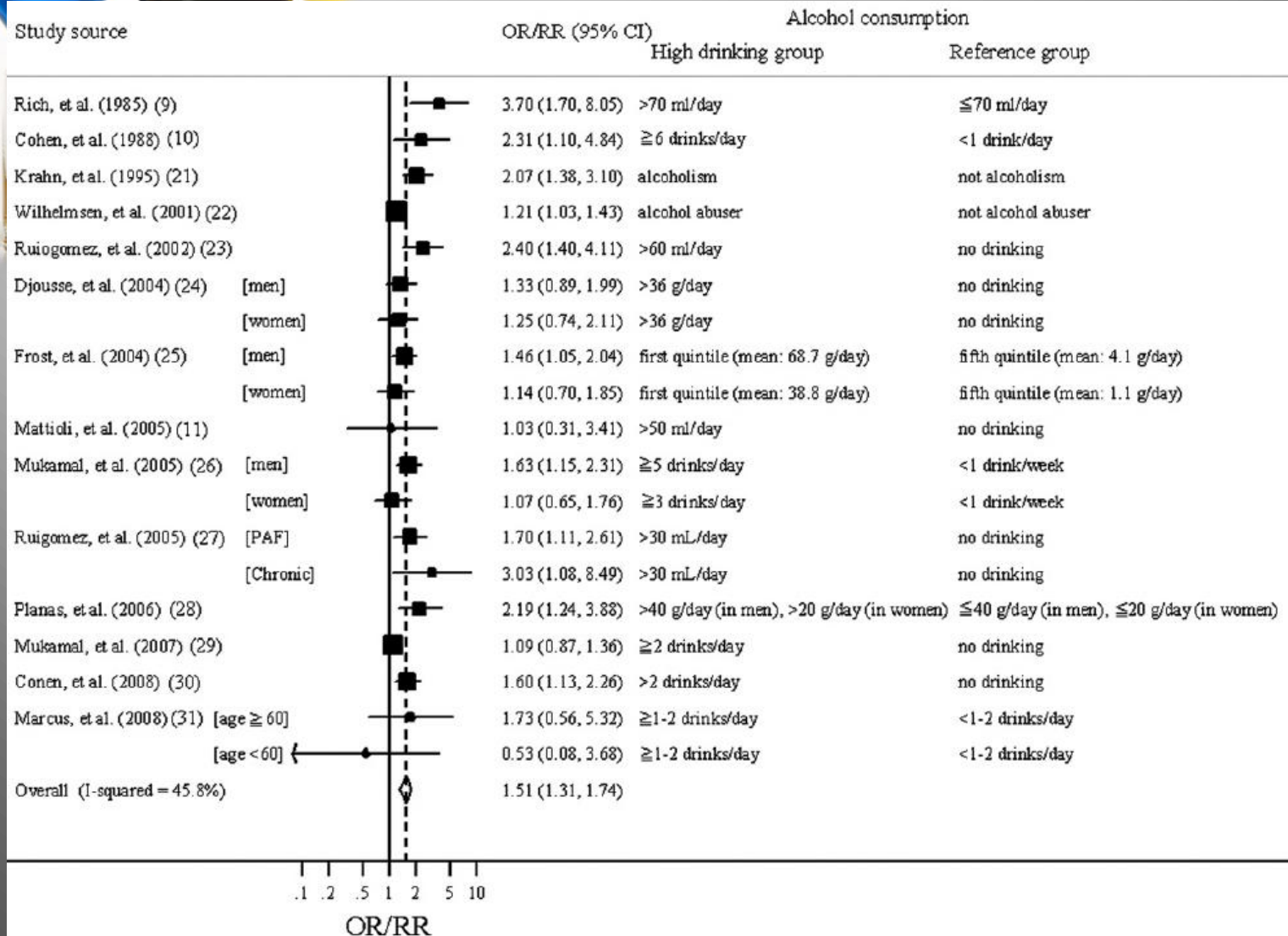
Coffee studies	Weight	Odds Ratio IV, Random, 95% CI
Cohort studies		
Klatsky 2011	31.3%	0.84 [0.76, 0.93]
Mukamal 2009	23.4%	0.65 [0.49, 0.87]
Wilhelmsen 2001	29.4%	1.17 [1.00, 1.37]
Subtotal (95% CI)	84.2%	0.88 [0.66, 1.17]
Heterogeneity: Tau ² = 0.05; Chi ² = 17.18, df = 2 (P = 0.0002); I ² = 88%		
Test for overall effect: Z = 0.90 (P = 0.37)		
Case-control study		
Mattioli 2005	15.8%	1.36 [0.84, 2.19]
Subtotal (95% CI)	15.8%	1.36 [0.84, 2.19]
Test for overall effect: Z = 1.26 (P = 0.21)		
Total (95% CI)	100.0%	0.94 [0.72, 1.22]
Heterogeneity: Tau ² = 0.06; Chi ² = 19.98, df = 3 (P = 0.0002); I ² = 85%		
Test for overall effect: Z = 0.45 (P = 0.65)		



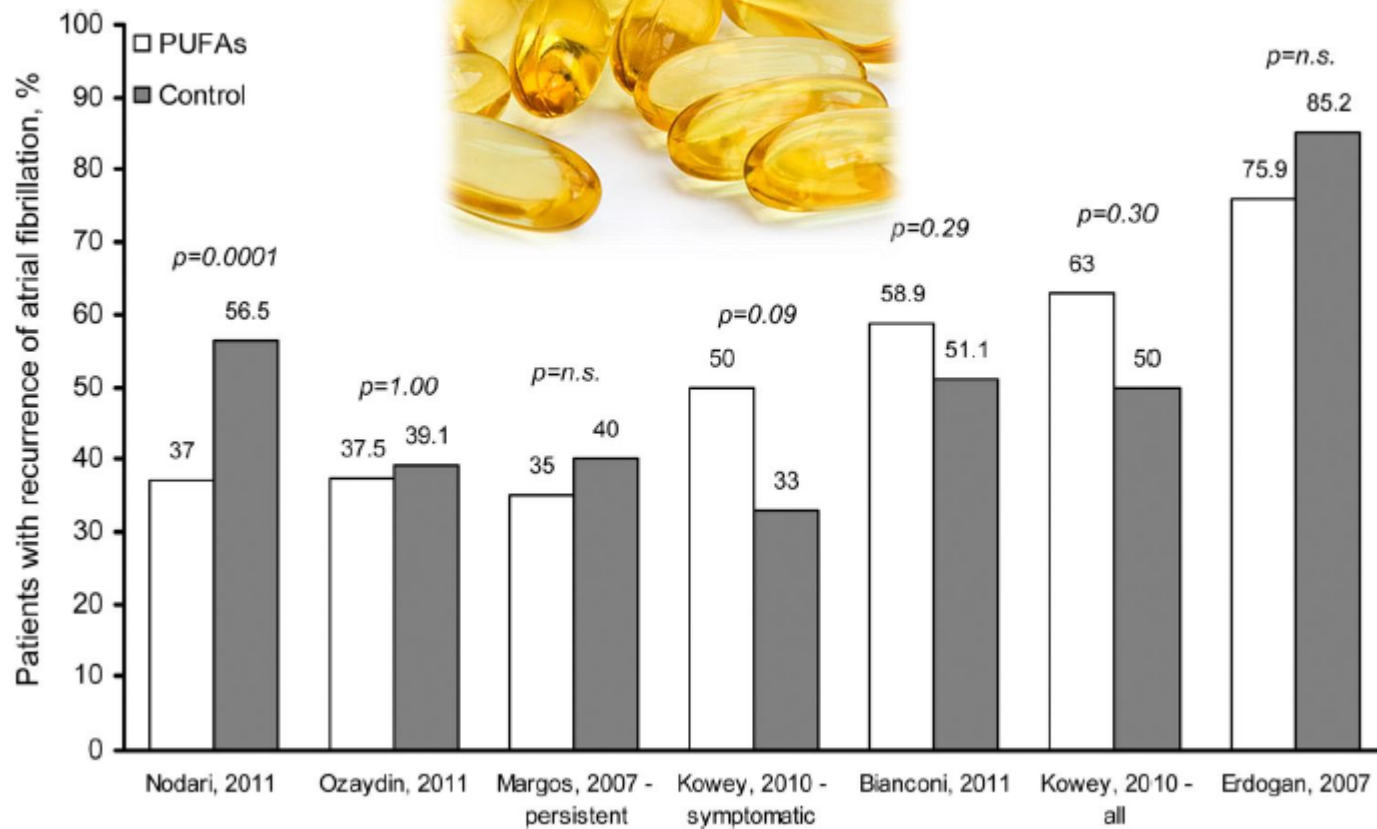
Caffeine does not increase the risk of atrial fibrillation: a systematic review and meta-analysis of observational studies

Daniel Caldeira,^{1,2} Cristina Martins,² Luís Brandão Alves,² Hélder Pereira,²
Joaquim J Ferreira,^{1,3} João Costa^{1,4,5}

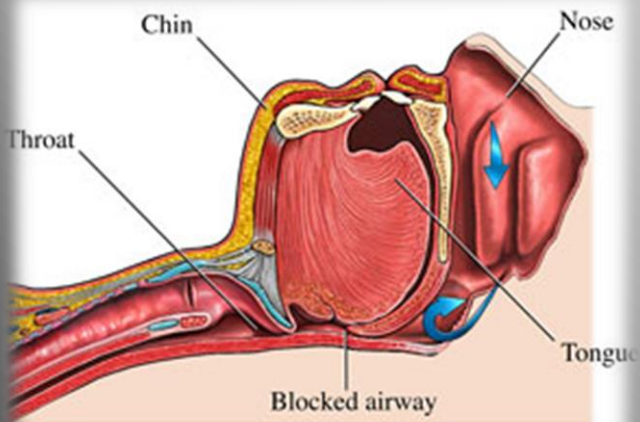
Diet and Afib



Diet and Afib



Sleep, Snoring and Afib



	Arrhythmias Included in Each Analysis	Odds Ratio (95% CI)
Primary overall analysis	62	17.5 (5.3–58.4)
Subanalysis by arrhythmia type		
PAF	15	17.9 (2.2–144.2)
NSVT	47	17.4 (4.0–75.7)
Subanalysis by sleep stage		
NREM	42	14.2 (4.2–48.0)
REM	20	*
Subanalysis by respiratory disturbance subtype		
No respiratory disturbance	18	Reference
Respiratory disturbance without hypoxia (nadir SpO ₂ ≤92%) or arousal	14	24.1 (5.4–106.6)
Respiratory disturbance with hypoxia	20	13.6 (3.7–50.6)
Respiratory disturbance with arousal	10	21.8 (4.5–106.3)

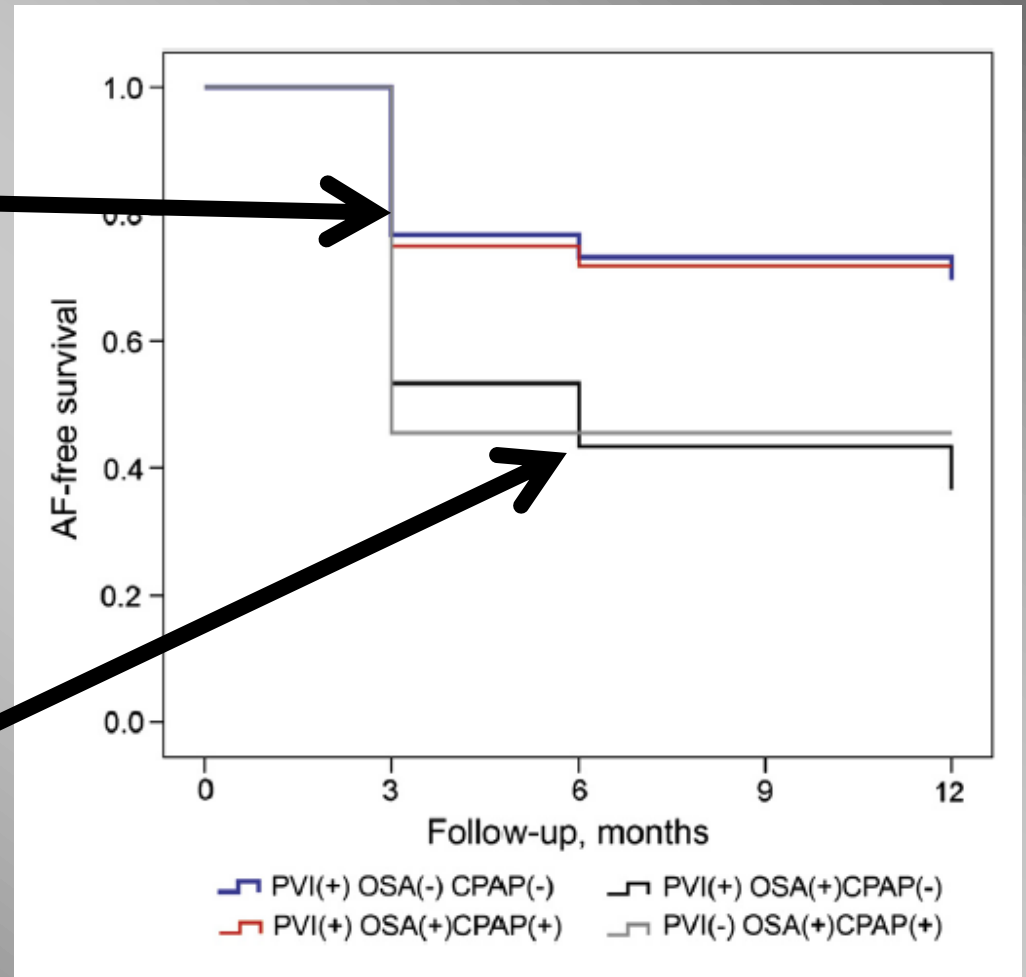
*Unable to be calculated.

CI = confidence interval; other abbreviations as in Tables 1 and 2.

Sleep, Snoring and Afib

People who didn't have sleep apnea and got an Afib ablation

People who DID have sleep apnea and got an Afib ablation, but DIDN'T use cpap

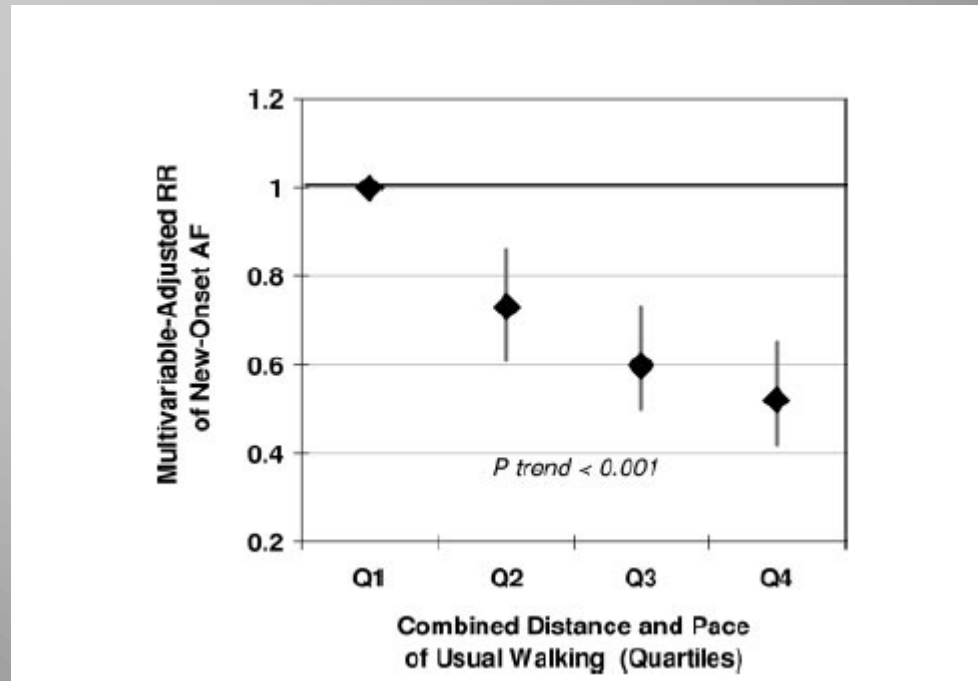


Exercise and Atrial Fibrillation



Study	Athletic population	Age (mean \pm SD, years)	Males (%)	AF in athletes (%)	AFi in athletes (%)	Relative risk (95% CI) for athletes
Pelliccia et al. ¹⁹	Elite athletes ($n = 1777$)	24 \pm 6	71	0.2 (all male, i.e. 0.3 in males)	0	–
Molina et al. ⁷	Non-elite marathon runners ($n = 183$)	39 \pm 9	100	4.9	0	8.8 (1.3–61.3)
	Controls ($n = 290$)	50 \pm 13	100	0.7	0	
Wilhelm et al. ²³	Non-elite runners ($n = 122$)	42 \pm 7	50	3.3 all male (i.e. 6.6 in males)	0	–
Karjalainen et al. ¹²	Veteran elite orienteers ($n = 262$)	47 \pm 5	100	5.3	0	5.5 (1.3–24.4)
	Controls ($n = 373$)	49 \pm 5	100	0.9	0	
Baldesberger et al. ⁶	Veteran elite cyclists ($n = 62$)	67 \pm 7	100	3.2	6.5	14.4 (0.8–261.1)
	Golfers ($n = 62$)	66 \pm 6	100	0	0	
Grimsmo et al. ²⁴	Veteran cross-country skiers ($n = 78$)	69 \pm 10	100	16.7	0	–

Exercise and Atrial Fibrillation



People who were more active had a lower risk of atrial fibrillation!
(Just don't over-do it.)

Educating Yourself



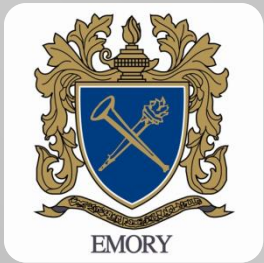
After 2-3 minutes of quiet sitting: 50bpm-100bpm

With exercise: <150bpm

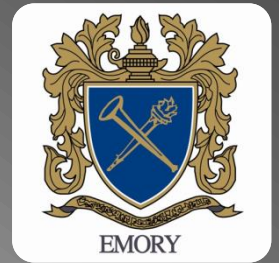
Educating Yourself

<https://www.hrsonline.org/>

<http://www.emoryhealthcare.org/arrhythmia/ask-experts-videos-arrhythmia.html>



Wrap-Up



There is more than one type of atrial fibrillation

You can help manage Afib by attention to weight, exercise, sleep, and diet

You can have a good quality of life with Afib, but keeping tabs on the pulse and your symptoms is key