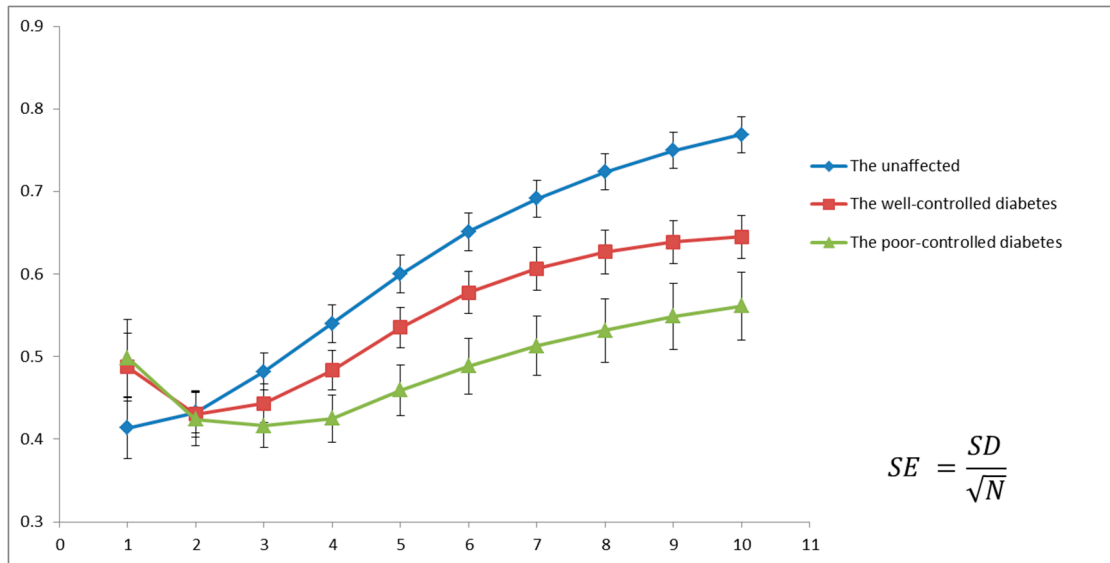


**Table S1.** Baseline Characteristics of the Three Age-Matched Groups (Unaffected, Diabetes, HbA1c <8% and Diabetes, HbA1c ≥8%) from the Subcohort.

	Unaffected	Diabetes, HbA1c <8%	Diabetes, HbA1c ≥8%
	<i>n</i> = 19	<i>n</i> = 28	<i>n</i> = 23
Men (%)	10 (52.6%)	17 (60.7%)	12 (52.2%)
Age, y	61.16 ± 6.04	64.48 ± 7.13	62.04 ± 6.52
Height, cm	161.16 ± 9.08	162.69 ± 8.65	160.70 ± 6.88
Weight, kg	63.19 ± 10.63	69.70 ± 14.61	72.35 ± 9.79 *
Waist circumference, cm	84.08 ± 7.99	91.81 ± 10.78 +	95.32 ± 10.36 *
BMI, kg/m <sup>2</sup>	24.21 ± 2.76	25.50 ± 6.27	28.05 ± 3.73 *
SBP, mmHg	123.68 ± 17.99	123.27 ± 15.48	122.22 ± 31.71
DBP, mmHg	75.68 ± 11.26	75.31 ± 10.39	73.30 ± 18.75
Pulse pressure, mmHg	48.00 ± 12.43	47.96 ± 11.00	49.91 ± 17.01
Total Cholesterol, mg/dL	187.90 ± 37.22	165.25 ± 26.27 +	197.64 ± 46.01 <sup>a</sup>
Triglycerides mg/dL	115.36 ± 104.91	119.50 ± 44.70	167.95 ± 91.21 <sup>a</sup>
HDL-Cholesterol, mg/dL	48.74 ± 14.02	38.65 ± 9.89 +	40.00 ± 8.73 *
LDL-Cholesterol, mg/dL	113.22 ± 31.32	96.45 ± 23.33	121.40 ± 29.46 <sup>a</sup>
Cholesterol/HDL ratio	4.10 ± 1.22	4.86 ± 2.97	5.11 ± 1.50 *
FPG, mg/dL	109.12 ± 23.57	129.45 ± 20.74 +	174.57 ± 56.57 **, <sup>a</sup>
HbA1c, %	6.08 ± 0.31	7.21 ± 0.36 **	9.48 ± 1.51 **, <sup>aa</sup>
ECG-PWV, cm/s	5.45 ± 0.28	5.76 ± 0.19 +	5.79 ± 0.54
MSE <sub>ss</sub>	1.29 ± 0.09	1.10 ± 0.07	1.13 ± 0.09
MSE <sub>ls</sub>	1.65 ± 0.11	1.39 ± 0.08	1.33 ± 0.09 **
MC-ApEn <sub>ss</sub>	0.49 ± 0.08	0.47 ± 0.14	0.45 ± 0.12
MC-ApEn <sub>ls</sub>	0.72 ± 0.08	0.62 ± 0.14 +	0.53 ± 0.17 **, <sup>a</sup>

Continuous variables are expressed as mean ± standard deviations and categorical variables as number (percentage). Abbreviations: BMI, body mass index; DBP, diastolic blood pressure; ECG-PWV, electrocardiographic pulse wave velocity; FPG, fasting plasma glucose; HbA1c, hemoglobin A1c; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; LS, large scales; MC-ApEn, multiscale cross-approximate entropy; MSE, multiscale entropy; SBP, systolic blood pressure; SS, small scales. Unaffected v.s. Diabetes, HbA1c < 8% + *p* < 0.05; \*\* *p* < 0.001; Unaffected v.s. Diabetes, HbA1c ≥ 8% \* *p* < 0.05; \*\* *p* < 0.001; Diabetes, HbA1c < 8% v.s. Diabetes, HbA1c ≥ 8% <sup>a</sup> *p* < 0.05; <sup>aa</sup> *p* < 0.001.



**Figure S1.** The MC-ApEn of bilateral index fingers with the standard error (vertical bar) of the age-matched unaffected (solid blue line), the well-controlled diabetes (solid red line), and the poorly-controlled diabetes (solid green line) at each scale factor, respectively.